193

THE

TIMES AND REGISTER.

A Weekly Journal of Medicine and Surgery.

Published under the auspices of the American Medical Press Association.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

Vol. XXIII. No. 20. Whole No. 688. } NEW YORK AND PHILADELPHIA, NOVEMBER 14, 1891. { Yearly Subscription $3.00, in advance. Single Numbers 10 cents.

VILLACABRAS

ENDORSED by the highest medical authorities as the **Most Effective and Harmless** natural purgative water known.

As to its use, see:

PROF. DUJARDIN-BEAUMETZ: Lecture on Gastric Neurasthenia and Its Treatment.—*Bullétin General de Thèrapeutique*, Paris, January, 1890.

PROF. DUJARDIN-BEAUMETZ: Lecture on the Treatment of Chronic Constipation and Its Complications.—*Bullétin General de Thèrapeutique*, Paris, April 15, 1890.

DR. GLENARD: Its Use in Cases of Insomnia Resulting from Dyspepsia.—*Lyon Medical*, 1887.

DR. F. LEROY SATTERLEE: Brochure on Rheumatism and Gout.—Geo. S. Davis, Publisher: Detroit, 1890.

DR. JAMES R. CROOK: Lecture on Pulmonary Diseases, at the New York Post-Graduate Medical School.—*New York Medical Journal*, August 30, 1890.

FOR SALE BY ALL LEADING DRUGGISTS, ETC.

EMERGENCY CASE.

THIS NOTICE WILL INTEREST YOU!

If you are unacquainted with the merits of our preparations, for $3.00 we will furnish you with a handsome double morocco Pocket Case, containing 24 two-drachm vials, filled with the following complete assortment of Tablets and Triturates:

Tr. Aconite, ½ minim.
Tr. Belladonna, 2 minim.
Nitro Glycerine Comp. (M. & Co.'s.)
Cascara Com. (M. & Co.'s.)
Ammon Mur. Comp.
Calomel, 1-10 grain.
Calomel, 2 grains.
Calomel, Ipecac and Soda Bi-Carb, No. 1.
Dover's Powder, 2½ grains.
Fever, (Dr. T. G. Davis.)
Hydrarg, Iodide Virid, ¼ grain.
Iron, Arsenic and Strychnia.

Hypopho nia Comp
Creaso
Acetanilid, 2 grains.
Morphia Sulph., 1-6 grain.
Zinc Sulpho-carb., 1 grain.
Acid Arsenious, 1-60 grain.
Acetanilid Comp. (M. & Co.'s.)
Bismuthet Cerii Oxalat.
Kermes Mineral Comp.
Paregoric, 10 minim.
Strychnia, 1-60 grain.
Quinia Sulph., 1 grain.
Corros. Sublimate, 1-40 grain.

No. 2. Size, 7⅛ x 3¾ x ⅞ inches. Price, $3.00.

This Being a Special Offer we Reserve Right to Cancel Same Without Notice.

We would call especial attention to our Tablets Hypophos, Quinia Comp. Cum Creasote, which are superior to syrups and solutions, owing to absence of sugar and free acid. Send for samples.

WRITE FOR COMPLETE LIST.

H. K. MULFORD CO., PHILADELPHIA.

FACTORS OF COMPRESSED GOODS AND PHARMACEUTICAL PREPARATIONS.

Published by the Medical Press Company, Limited, 1725 Arch Street, Philadelphia, Pa.

Agents in Paris: E. Besinee, 19 Rue Vaneau. Entered at the Philadelphia Post Office as second-class mail matter.

JAROS HYGIENIC UNDERWEAR

WOOL FLEECE KNIT

FORMULA.—Unspun Wool, knitted into meshes of a cotton thread. Basis, the theories of Profs. Von Pettenkofer, Parkes, Kreiger, Buck and others.

ADVANTAGES.—Capillary action of unspun wool upon the body. Greatest hydroscopic qualities and non-irritating. Interstices naturally formed, stores body temperature. Prevents rapid radiation during climatic changes, aids transportation of moisture. Porosity, elasticity, perfect fit and non-shrinkability are regarded.

INDICATIONS.—Rheumatism, Kidney Disease (Nephrites), Pulmonary Consumption, Catarrhal Troubles, La Grippe, etc., as well as a general prophylactic.

NOTE.—Features accomplished have been recognized by the medical profession since 1884, also endorsed by U. S. Army, U. S. Navy, Police and Fire Departments.

80-Page Treatise containing reports of results in special practice as well as from U. S. Government, mailed post-paid on application

(H. & P.—21)

Jaros Hygienic Underwear Co.

831 BROADWAY, NEW YORK.

For letters no street address is necessary

SOUTHERN PINES, N. C.

THE IDEAL PLACE for those suffering from Pulmonary Troubles.

Situated on the crest of Shaw's Ridge with a deposite of white sand from 30 to 90 feet deep, in the midst of the Long Leaf Pine region.

Dry Atmosphere, Equitable Temperature,
Pure Water,
Air Laden With Balsamic Odor of Pines,

all combine to make it

THE MOST DESIRABLE RESIDENCE FOR CONSUMPTIVES

Within twenty-four hours' ride of New York City. Good hotels, reasonable rates, good tables and a health-giving atmosphere.

Those Suffering from all Pulmonary Diseases are Immediately Relieved.

Asthmatics sleep at once in the prone position.

On account of the purity of the water, those suffering from urinary complications and diseases are benefited.

Sufferers from insomnia, from overwork and other causes sleep here as in childhood.

SEND FOR PAMPHLET.

SOUTHERN PINES RESORT CO.,

SOUTHERN PINES, N. C.

MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.

The Regular Session begins October 1, 1891, and continues until May. It is preceded by a Preliminary Session of three weeks, beginning September 7th.

Preliminary examination, or equivalent degree and three years graded course, obligatory. Special clinical facilities.

Instruction is given by lectures, recitations, clinical teaching, and practical demonstrations. In the subjects of Anatomy, Pharmacy, Physiology, Hygiene, Therapeutics, Histology, and Pathology, the usual methods of instruction are largely supplemented by laboratory work.

Examinations are held at the close of each Regular Session upon the studies of that term. Although the degree of Doctor of Medicine is conferred at the end of the third year, a fourth year is earnestly recommended, at the end of which the degree of Doctor of Medicine cum laude is given.

FEES.—Matriculation, $5; first and second years, each, $75; third year (no graduation fee), $100; fourth year free to those who have attended three Regular Sessions in this school, to all others, $100. Extra charges only for material used in the laboratories and dissecting-room. For further information or announcement address,

ERNEST LAPLACE, M.D.,
Secretary, Medico-Chirurgical College, Cherry St., below 18th St., Phila., Pa

Exercise not for strength, but for health.—*Isocrates.*

ELEVENTH SEASON.

SANATORY GYMNASIUM—SARGENT SYSTEM,

1420 CHESTNUT STREET, PHILADELPHIA.

TO THE PROFESSION: I shall be glad to take charge of any of your patients, whom you may wish to take physical exercise for the treatment of chronic heart or lung disease, a disordered liver, constipation, dyspepsia, insomnia, chorea, rheumatism, paralysis, spinal curvature, or any acquired physical deformity. Respectfully, W. A. FORD, M.D.

REFERENCES BY PERMISSION: D. HAYES AGNEW, M.D., J. M. DACOSTA, M.D., DEFOREST WILLARD, M.D.

GRIFFITH & CO.'S COMPOUND MIXTURE OF GUAIAC, STILLINGIA, ETC.

After ten years of thorough trial, is now considered by physicians to be the standard remedy

FOR ACUTE AND CHRONIC RHEUMATISM, GOUT, LUMBAGO, NEURALGIA, AND KINDRED COMPLAINTS.

TO PHYSICIANS.—Gentlemen: We would respectfully draw your attention to our **Compound Mixture of Guaiac, Stillingia, etc.** *This preparation* has been in constant use by many prominent practitioners of medicine for several years, and its beneficial results in the treatment of the diseases indicated, including Syphilitic troubles, have been fully established.

When ordering this preparation, in order to avoid delay or misunderstanding, physicians will please specify "GRIFFITH & CO.'S," or physicians in the city can send their patients direct to our pharmacies, at **No. 67 Third Ave., cor. 11th St.**, or **2241 Third Ave., cor. 122d St., New York**, where, at any time, further information will be cheerfully furnished. Out of town physicians can order through their druggists or direct from us.

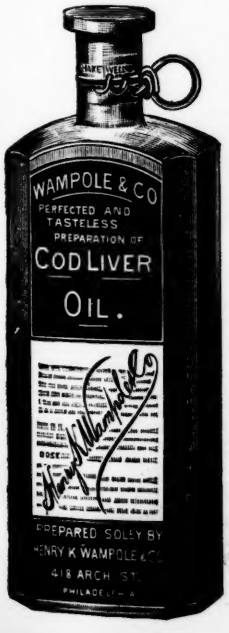
We have hundreds of testimonials from prominent physicians who have prescribed and personally used this mixture. It is manufactured for PHYSICIANS' PRESCRIPTIONS only. Always specify GRIFFITH & CO.'S. If you have an obstinate case of Rheumatism under treatment, inclose one dollar and receive, by express, a regular size bottle, or we will send, upon request, a sample bottle, providing you will pay express charges. Wholesale Price List—8-ounce size, $10.50 per dozen; 16 ounce size, $20 00 per dozen. In lots of one dozen and upwards, we prepay express charges to any point east of the Rocky Mountains. (*Do not overlook this offer, for you may be pleased, and possibly surprised at the result, for the general verdict of the profession is that if this remedy fails to act it is a difficult matter to find anything that will.*)

P. S.—The advertising of this article is confined strictly to Medical Journals Very respectfully,

GRIFFITH & CO., CHEMISTS AND PHARMACISTS, { 67 Third Ave., cor. 11th St., / 2241 Third Ave., cor. 122d St., } NEW YORK.

Carried in stock by the principal Wholesale Druggists in the U. S.

Wampole's Perfected and Tasteless Preparation of Cod-Liver Oil.



Combined with Extract of Malt, Fluid Extract of Wild Cherry Bark and Syrup Hypophosphites Compound (containing Lime, Soda, Potassium Iron, Manganese, Quinine, and Strychnia).

Containing the curative agents from 25 per cent. Pure Norwegian Cod-Liver Oil. Rendered pleasant and agreeable by the addition of choice Aromatics. For full directions, see circular surrounding bottle.

We invite your attention to the "fac simile" of an Analysis made by Charles M. Cresson, M.D., certifying to the value and efficacy of this Preparation, and which we have printed on the back of our circular.

NUTRITIVE. TONIC. STIMULANT.

Put up in 16-ounce bottles, full measure, $8.00 per dozen, net.

Put up in 5-pint bottles for convenience in dispensing, and as a regular stock bottle. 5-pint bottles, each $3.00, net.

Wampole's Concentrated Extract of Malt	$2.00 per doz.
" Syrup Hypophosphites Compound	$3.50 per 5-pint bottle.
" " Hydriodic Acid	$8.00 per doz. in lb. bottles.
" Granular Effervescent Salts.	

HENRY K. WAMPOLE & CO.,

(Please mention The Times and Register) **418 ARCH STREET, PHILA.**

Notes and Items.

THE statement that a detective recently caught a cold has been received in suggestive silence.

WE still cling to the simple fable that the acme of human wisdom is to know when to lay down a poker hand.—*Siftings.*

"How came you to construct such a lax divorce law?" "Pardner," replied the South Dakotan, "them that goes to our State for divorces has to buy real estate to acquire a residence."—*Indianapolis Journal.*

FRUIT VENDER: "I feela bada."
Faithful Wife: "Why you feela bada?"
Fruit Vender: "One of the peaches I sella thata man was gooda."

FIVE DOLLAR OFFER.—The best medical journal, THE TIMES AND REGISTER, and the best literary magazine, *Lippincott's*, for Five Dollars. This offer holds good only until January 1, 1892. THE MEDICAL PRESS COMPANY, L'T'D, 1725 Arch St., Phila., Pa.

PROF. S. ASHER, of Philadelphia, the celebrated dancing teacher of that city, will form a private class in New York, provided a sufficient number of pupils can be procured.
Address, PROF. S. ASHER, Philadelphia.
Or our New York office, 218 E. 34th St.

Alcohol and Opium Cases.

Private Apartments in the homes of physicians (but one case in each) with every convenience, and all modern appliances for treatment. Strict privacy guaranteed. Skilled attendance.
Address,
WILLIAM F. WAUGH, M.D.,
1725 Arch St., Philadelphia, Pa.

PRIVATE SANITARIUM.

For Medical and Surgical treatment of Diseases of Women,
DR. E. E. MONTGOMERY,
1818 Arch St., Phila.

PRIVATE.

LYING-IN HOSPITAL.

ELEGANTLY situated in the healthiest and most beautiful suburb of Nashville, Tenn. All modern conveniences. A staff of trained nurses. No publicity. The best care and attention given mother and child. Correspondence from physicians solicited. Address,
C. W. PARKER, M.D.,
340 N. Cherry St., Nashville, Tenn.

LADIES cared for during confinement, at the home of an experienced nurse. Best references given.
Address, NURSE, office TIMES AND REGISTER.

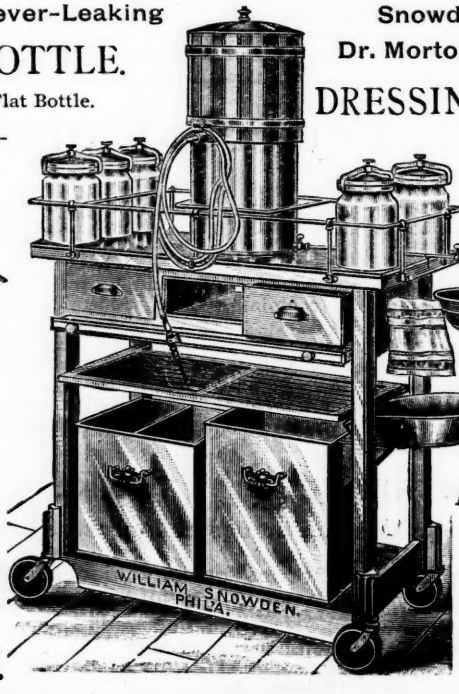
THE JAROS
HYGIENIC UNDERWEAR
Is on sale at Philadelphia at
CHAS. E. SHEDAKER'S,
N. E. Cor. Eighth and Walnut Streets.

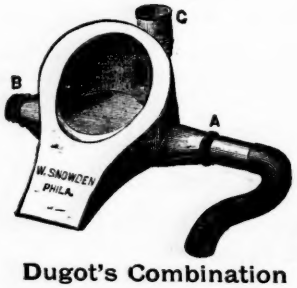
DR. MASSEY'S
PRIVATE SANATORIUM.

Presenting the comforts of an elegant private residence, this institution is specially equipped for the use of electricity and allied remedial measures in the diseases of women and in diseases of the nervous system. For particulars address,
G. BETTON MASSEY, M.D.,
212 S. Fifteenth St., Philadelphia.

The Polyclinic Never-Leaking
ETHER BOTTLE.
New Style—A Flat Bottle.
—Price—
$1.00.

Snowden's Improved
Dr. Morton's Surgical Ward
DRESSING CARRIAGE.
No Hospital Complete Without It.

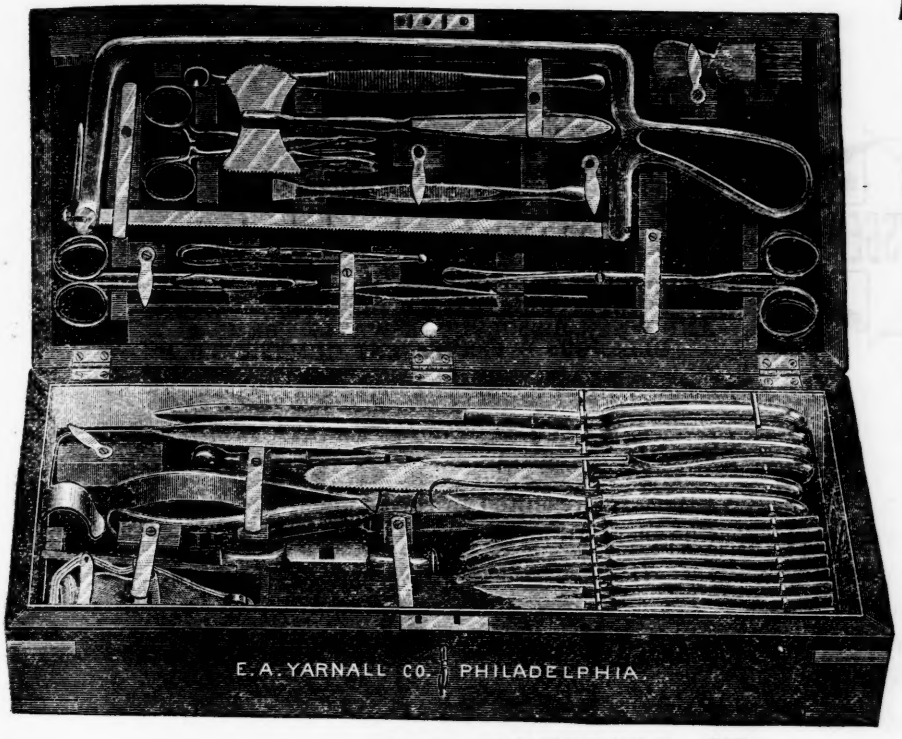




Dugot's Combination
DOUCHE AND BED-PAN.
Price, $5.00.

Esbach's
ALBUMINOMETER
For the Quantitative Determination of Albumin.
Price, 75 Cents.

WILLIAM SNOWDEN,
MANUFACTURER, IMPORTER AND EXPORTER OF
SURGICAL INSTRUMENTS AND APPLIANCES,
NO. 121 SOUTH ELEVENTH STREET, PHILADELPHIA.



A NEW LINE OF ASEPTIC OPERATING CASES.

—□—

No. 4
CONTAINS
21 INSTRUMENTS.
PRICE, $25.00.

—□—

No. 15
CONTAINS
26 INSTRUMENTS.
PRICE, $48.00.

—□—

No. 16
(SEE CUT.)
CONTAINS
41 INSTRUMENTS.
PRICE, $70.00.

—□—

All Hardwood Cases with Movable Metal Racks.

E. A. YARNALL CO.,

MANUFACTURERS OF
SURGICAL INSTRUMENTS.

1020 Walnut street, Philadelphia.

PROF. S. ASHER,

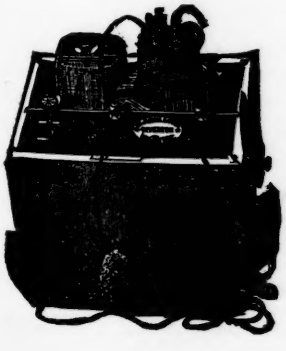
Teacher of FASHIONABLE DANCING,

Natatorium Hall, Broad Street, below Walnut, Philadelphia.

Being a member of the Society of "Professors of Dancing," of New York City, enables me to introduce all the Latest Fashionable Dances as taught and danced in New York and Eastern Cities.

CLASS ARRANGEMENTS.

For Ladies and Gentlemen.—Tuesday and Thursday evenings, from 7 until 10 o'clock.
Private class for Ladies and Gentlemen now forming.
For Misses and Masters.—Wednesday and Saturday afternoons from 3 until 5 o'clock. Classes always open for beginners.
Special arrangements made for private classes in or out of the City.
All the fashionable dances, including the Glide, Heel-and-Toe, Glide Polka, Varsovienne, Schottische, Minuet, German, etc., taught by an original method. Glide Waltz a Specialty, and taught in 3 to 5 private lessons.
Classes for Young Ladies, Misses and Masters, every Saturday morning from 10 to 2. Private class for Children (4 to 6 years) a Specialty. Class for Young Ladies every Wednesday, from 5 to 6.
Private lessons any hour, day or evening, to suit the convenience of the Pupil. Personal attention given to classes at Residences, Seminaries, in or out of the city, at reasonable terms.



SUPERIOR
Electro-Medical Apparatus.
Highest awards wherever exhibited in competition.

SEND FOR Abstract on Bipolar Faradization, mailed free if you mention The Times and Register.

ADDRESS,
JEROME KIDDER MFG. CO.,
820 Broadway, N. Y.
Liberal discount to Physicians.

Established 1849.

D. W. KOLBE & SON,

Surgical, Orthopaedical and Artificial Appliances,

1207 Arch St.,
PHILADELPHIA, PA.

Apparatus for Paralysis, Knock-knee, Club-foot, Hip Disease, etc.

Send for Catalogues and Measurement Blanks.

KOLBE'S APPARATUS FOR ANCHYLOSIS.

OR

Carnrick's Kumyss Tablets

A PRODUCT OF PURE, SWEET MILK, PALATABLE, NUTRITIOUS, EASILY DIGESTED, AND WHEN DISSOLVED IN WATER FORMS A DELICIOUS EFFERVESCENT KUMYSS.

(*Put up in air-tight bottles, in two sizes; the larger holding sufficient Tablets for seven twelve-ounce bottles, and the smaller sufficient for three twelve-ounce bottles of Kumyss.*)

THIS PREPARATION is presented to the Medical Profession in the convenient form of Tablets, and will be found superior in every respect to ordinary *Kumyss*, *Wine of Milk*, *Fermented Milk*, or any similar preparation.

Kumysgen when prepared for use contains every constituent of a perfect Kumyss.

Kumysgen is made from fresh, sweet milk, and contains fully thirty per cent. of soluble casein, which is double the amount found in ordinary Kumyss preparations.

Kumysgen being in Tablet form, will keep indefinitely, is easily and readily prepared, less expensive than the ordinary variable and perishable Kumyss, and its *fermentative action* may be regulated at will, thus rendering it available at all times and under all circumstances.

Clinical tests gathered from every quarter of the globe attest its special value in all cases of *Gastric* and *Intestinal Indigestion* or *Dyspepsia*, *Pulmonary Consumption*, *Constipation*, *Gastric and Intestinal Catarrh*, *Fevers*, *Anæmia*, *Chlorosis*, *Rickets*, *Scrofula*, *Vomiting in Pregnancy*, *Bright's Disease*, *Intestinal Ailments of Infants*, *Cholera Infantum; for young children and for convalescents from all diseases.*

The casein being finely subdivided, it is especially valuable for all who require an easily digested or a partially digested Food.

Kumysgen is a delicious effervescent Food-Beverage, relished alike by the sick or well.

Kumysgen is tonic, stimulant, diuretic, highly nutritious, easily digested, perfectly palatable, and always *permanent* and *uniform* in strength.

SAMPLE SENT ON REQUEST.

MANUFACTURED BY

REED & CARNRICK, New York.

NEW YORK

POLYCLINIC

AND

HOSPITAL.

A Clinical School for Graduates in Medicine and Surgery.

DIRECTORS.

THOMAS ADDIS EMMET, M.D., LL.D.
PROF. T. GAILLARD THOMAS, M.D.
PROF. ALFRED L. LOOMIS, M.D., LL.D.
LEONARD WEBER, M.D.
HON. EVERETT P. WHEELER.
H. DORMITZER, ESQ
JULIUS HAMMERSLAUGH, ESQ.
HON. B. F. TRACY,
CHARLES COUDERT, ESQ.
REV. THOMAS ARMITAGE, D.D.
W. A. BUTLER, ESQ.
WILLIAM T. WARDWELL, ESQ.
GEORGE B. GRINNELL, ESQ.
HON. HORACE RUSSELL,
SAMUEL RIKER, ESQ.

FACULTY.

JAMES R. LEAMING, M.D., Emeritus-Professor of Diseases of the Chest and Physical Diagnosis; Special Consulting Physician in Chest Diseases to St. Luke's Hospital.

EDWARD B. BRONSON, M.D., Professor of Dermatology; Visiting Dermatologist to the Charity Hospital; Consulting Dermatologist to Bellevue Hospital (Out-door-Department).

A. G. GERSTER, M.D., Professor of Surgery; Visiting Surgeon to the German and Mt. Sinai Hospitals.

V. P. GIBNEY, M.D., Professor of Orthopædic Surgery; Orthopædic Surgeon to the Nursery and Child's Hospital; Surgeon-in-Chief to the Hospital for Ruptured and Crippled.

LANDON CARTER GRAY, M.D., Professor of Diseases of the Mind and Nervous System; Attending Physician to Hospital for Nervous and Mental Diseases, and to St. Mary's Hospital.

EMIL GRUENING, M.D., Professor of Ophthalmology; Visiting Ophthalmologist to Mt. Sinai Hospital, and to the German Hospital.

PAUL F. MUNDÉ, M.D., Professor of Gynecology; Gynecologist to Mt. Sinai Hospital; Consulting Gynecologist to St. Elizabeth's Hospital.

A. R. ROBINSON, M.B., L.R.C.P. and S. (Edin.), Professor of Dermatology; Professor of Normal and Pathological Histology in the Women's Medical College.

DAVID WEBSTER, M.D., Professor of Ophthalmology; Surgeon to the Manhattan Eye and Ear Hospital.

JOHN A. WYETH, M.D., Professor of Surgery; Visiting Surgeon to Mt. Sinai Hospital; Consulting Surgeon to St. Elizabeth's Hospital; Secretary of the Faculty.

W. GILL WYLIE, M.D., Professor of Gynecology; Gynecologist to Bellevue Hospital; President of the Faculty.

R. C. M. PAGE, M.D., Professor of General Medicine and Diseases of the Chest; Physician to St. Elizabeth's Hospital; Attending Physician to the Northwestern Dispensary, Department of Chest Diseases.

D. BRYSON DELAVAN, M.D., Professor of Laryngology and Rhinology; Laryngologist to the Demilt Dispensary.

JOSEPH WILLIAM GLEITSMANN, M.D., Professor of Laryngology and Rhinology; Laryngologist and Otologist to the German Dispensary.

OREN D. POMEROY, M.D., Professor of Otology; Surgeon Manhatten Eye and Ear Hospital; Ophthalmic Surgeon New York Infants' Asylum, and Consulting Surgeon to the Paterson Eye and Ear Infirmary.

HENRY N. HEINEMAN, M.D., Professor of General Medicine and Diseases of the Chest; Attending Physician to Mt. Sinai Hospital.

THOMAS R. POOLEY, M.D., Professor of Ophthalmology; Surgeon-in-Chief of the New Amsterdam Eye and Ear Hospital; Ophthalmic Surgeon to the Sheltering Arms; Consulting Ophthalmologist to St. Bartholomew's Hospital.

B. SACHS, M.D., Professor of Neurology; Consulting Neurologist to the Montefiore Home for Chronic Invalids.

L. EMMETT HOLT, M.D., Professor of Diseases of Children; Visiting Physician to the New York Infant Asylum; Consulting Physician to the Hospital for Ruptured and Crippled.

AUGUST SEIBERT, M.D., Professor of Diseases of Children; Physician to the Children's Department of the German Dispensary.

H. MARION SIMS, M.D., Professor of Gynecology; Gynecologist to St. Elizabeth's Hospital and New York Infant Asylum.

WILLIAM F. FLUHRER, M.D., Professor of Genito-Urinary Surgery; Surgeon to Mt. Sinai and Bellevue Hospitals.

HENRY C. COE, M.D., M.R.C.S. (Eng.), Professor of Gynecology; Attending Surgeon to New York Cancer Hospital; Assistant Surgeon to Woman's Hospital; Obstetric Surgeon to Maternity Hospital; Obstetrician to New York Infant Asylum; Gynecologist to Presbyterian Hospital (Out-door Department).

EDWARD A. AYERS, M.D., Professor of Obstetrics; Attending Physician to the New York Lying-in Asylum, (Out-door Department).

ROBERT H. M. DAWBARN, M.D., Professor of Operative Surgery and Surgical Anatomy.

REGULAR SESSION NOW IN PROGRESS.

For further information, and for catalogue, address **JOHN A. WYETH, M.D., Secretary of the Faculty,**

Or, WILLIS O. DAVIS, Clerk, 214, 216 and 218 East 34th St., New York City.

BERND'S PHYSICIANS REGISTERS.

For Office and Pocket Use.

The Most Practical System of Keeping Physicians Accounts.

Send for Circular Containing Price List, Description and Opinions.

HENRY BERND & CO.,

2631 CHESTNUT STREET, ST. LOUIS, MO.

SYRUP EUCALYPTUS COMPOUND

(TYNDALE'S.)

Formula No. 1.

Eucalyptus Globulus.
Eucalyptus Resinifera.
Horehound Herb.
Elecampane Root.
Liquorice Root.
Comfrey Root.

To No. 1 is added the Muriate of Ammonia, (Squibbs), in proportion of 2 grains to the drachm, and it does not contain Morphine.

A CONVENIENT AND RELIABLE PREPARATION Prepared by

THE TYNDALE EUCALYPTUS CO. CHICAGO U.S.A.

Formula No. 2.

Eucalyptus Globulus.
Eucalyptus Resinifera.
Horehound Herb.
Elecampane Root.
Liquorice Root.
Comfrey Root.

To No. 2 is added the Acetate of Morphine, (P. & W.) one-thirty second of a grain to the drachm, and it does not contain Ammonia.

PREPARED expressly for physicians in the treatment of Pulmonary Diseases, and containing in addition to the Syrup Compound, the Muriate of Ammonia in No. 1, and the Acetate of Morphine in No. 2. Packed in pint bottles, trade price $11.50 per dozen, and in quart bottles, $20 per dozen.

THIS COMPOUND has proven very valuable in Coughs from Cold, and is especially good where there is Bronchitis or Tightness of the Chest from Pneumonia or other Diseases of the Lungs. It has Antiseptic properties that are very valuable in all Suppurative Diseases and Gangrene of the Lungs. It is efficacious in certain stages of Consumption, and has an ameliorating effect in Asthma.

Our No. 1 is flavored by a superior extract of Orange Peel, (sweet), which disguises the taste of the Ammonia, making a most palatable preparation readily taken by anyone, and without effect on a weak stomach. It has met with universal favor.

TYNDALE'S PURE EUCALYPTUS OIL, manufactured under our own supervision at Victoria, Australia, and is the volatile essence of the leaf only, containing no admixture and will be preferred by all who give it a trial. Packed in ½-ounce bottles. Price, $6 per dozen.

TYNDALE'S EUCALYPTUS OINTMENT for Ulcerated Sores, Burns, Wounds, and invaluable as a dressing for Fistula, Piles, etc. Packed in pound packages. Price, $11.50 per dozen.

OUR PREPARATIONS ARE FOR SALE BY ALL LEADING WHOLESALE DRUGGISTS, OR CAN BE ORDERED AT SHORT NOTICE.

THE TYNDALE EUCALYPTUS CO.,

CHICAGO, U. S. A.

BULLOCK & CRENSHAW, Philadelphia.
McKESSON & ROBBINS, New York.
GILPIN, LANGDON & CO., Baltimore.
CUTLER BROS. & CO., Boston.
MEYER BROS., DRUG CO., St. Louis and Kansas City.
NOYES BRO. & CUTLER, St. Paul.
STRONG, COBB & CO., Cleveland.
REDINGTON & CO., San Francisco.

Notice to Advertisers:

The first number of January, 1892, will be a special issue; going to every physician in the following States and Territories:

ARIZONA	69	MISSOURI	5000
ARKANSAS	1800	WYOMING TERRITORY	50
MONTANA	160	UTAH TERRITORY	150
NEBRASKA	1400	TEXAS	3700
NEVADA	50	MICHIGAN	3550
NEW MEXICO	160	MINNESOTA	1450
WASHINGTON	500	KANSAS	2900
COLORADO	800	WISCONSIN	1700
NORTH AND SOUTH DAKOTA	600	INDIANA	4800
OREGON	600	IOWA	3400
CALIFORNIA	3000	ALASKA	8
KENTUCKY	3000	INDIAN TERRITORY	350
IDAHO	100	ILLINOIS	6500

Canada 3800

Advertisers desiring space in this issue will please notify us promptly; as considerable time is necessary to run so large an edition through the press.

THE MEDICAL PRESS COMPANY, LTD.,
1725 Arch St., Philadelphia.

The Times and Register.

Vol. XXIII, No. 20. NEW YORK AND PHILADELPHIA, NOVEMBER 14, 1891. Whole No. 688.

PAGE

ORIGINAL ARTICLES.

ELECTRICAL CONTACT FORCE. By Henry McClure, M.D., Crower, Norfolk, England 399
SOME POINTS IN THE TECHNIQUE OF ELECTROLYTIC EPILATION. By Plym S. Hayes, M.D., Chicago, Ill. - - - - - - - - - - 401
TWO NEW ELECTRODES. By J. H. Kellogg, M.D. - - - - - - - - - - - - - - - 402
THE GALVANO CAUTERY—ITS USE IN REMOVAL OF PILES AND GROWTHS. By Ephraim Cutter, M.D., LL.D. - - - - - - 403
INTERESTING CASES OF ABDOMINAL TUMORS. By M. Price, M.D. - - - - - - - 405
RETENTION OF URINE CAUSED BY MULTIPLE URETHRAL CALCULI. By J. V. Prewitt, M. D., West Point, Ky. - - - - - - - 407
THE SIMPLE EXTRACTION OF CATARACT. By Edward Jackson, M.D. - - - - - - - 408

SOCIETY NOTES.

PHILADELPHIA COUNTY MEDICAL SOCIETY, 410
Interesting Cases of Abdominal Tumors. *Price* - - - - - - - - - - - - - - - 410
The Simple Extraction of Cataract. *Jackson* - - - - - - - - - - - - - - - - 413

PAGE

NEW YORK ACADEMY OF MEDICINE - - - 414
Bond's Operation for Talipes Valgus. *Phelps* - - - - - - - - - - - - - - - 414
A Case of Multiple Joint Disease. *Sayre* - 415
An Unusually Severe Case of Congenital Lateral Curvature. *Sayre* - - - - - - 416
A Remarkable Recovery by Nature's Methods. *Gibney* - - - - - - - - - - 416
The Necessity for Early Mechanical Treatment in Infantile Paralysis. *Townsend* - - - - - - - - - - - - 416

THE POLYCLINIC.

CHILDREN'S HOSPITAL:
Tinea Tonsurans. *Meigs* - - - - - - - 417
COOPER HOSPITAL (N. J.) NOTES:
The Treatment of Vaginismus. *Godfrey*, 417

EDITORIALS.

DIPHTHERIA - - - - - - - - - - - - - - 418
BUSINESS OR PROFESSION - - - - - - - - 418
ELECTRO THERAPEUTICS - - - - - - - - 418

LETTERS TO THE EDITOR.

Electric Batteries. *Bennett* - - - - - - - 418
"Some Hospital Considerations." *Kernan*, 419

PAGE

THE MEDICAL DIGEST.

Fractured Clavicle. *Waugh* - - - - - - - 419
Sulphonal. *Erede* - - - - - - - - - - - 419
Dysmenorrhœa. *Waugh* - - - - - - - - 419
Emulsion of Iodol. *Trouchet* - - - - - - 419
Hydrogen Peroxide a Valuable Antidote for Hydrocyanic Acid Poisoning. *Kobert* - - 419
Obesity and Sterility. *McKee* - - - - - - 418
Yamp; or, Carum Gairdneri. *Trimble* - - 419
Bacillus Coli Communis. *Chantemesse* - - 420
For Painless Uterine Dilatation - - - - - 420
Strontium Salts. *Laborde* - - - - - - - 420
The Therapeutic Employments of Tobacco. *Bird* - - - - - - - - - - - - - - - 420
Mouth wash. *Miller* - - - - - - - - - - 420
A Case of Alcoholism. *Waugh* - - - - - 420
Inveterate Neuralgia. *Waugh* - - - - - 420
Cocillana. *Eckfeldt* - - - - - - - - - - 420
Glanders and Mercury. *Koudorsky* - - - 420
Pistol-shot Wounds of the Brain. *Ransohoff* 420
FRENCH NOTES. *Roussel* - - - - - - - - 421
Hydrochloric Acid in Diphtheria. *Roux and Yersin* - - - - - - - - - - - - - 421
The Treatment of Ulcers by the Application of Heat. *Stepanoff* - - - - - - - 421
MEDICAL NEWS AND MISCELLANY, 421
NOTES AND ITEMS - - - - - - - - iv, x

Original Articles.

ELECTRICAL CONTACT FORCE.[1]

BY HENRY McCLURE, M.D.,
CROWER, NORFOLK, ENGLAND.

THE subject I have chosen for my short paper is contact force at the junction of dissimilar metals or other substances. A definite view of what is going on at such a junction would clear the way to a better understanding of the complex phenomena of electricity.

At the junction begins the work, whether we take dissimilar metals immersed in a fluid, dissimilar metals immersed in air, or dissimilar substances or dialectrics brought together. I wish to treat the subject by the light of modern views of electricity, with the hope of clearing away some obscurities.

In the first place, it would be well to consider two dissimilar metals, zinc and copper, immersed in a fluid—acidulated water. Such water contains atoms of oxygen and hydrogen, free or potentially free, that is, actually dissociated or so frequently interchanging at random from molecule to molecule that the direction of their motion may be guided by feeble directive force. Each of these atoms in a free state possesses a charge of electricity, the hydrogen a certain amount of positive electricity, the oxygen twice that amount of negative.

Zinc and copper both attract oxygen, but zinc more than copper.

The free oxygen atoms begin moving up to the zinc, the free hydrogen atoms to the other plate. It is not necessary to assume that the plates are attracting all the atoms in the liquid far and near; all that is necessary to assume is a force acting on the atoms in the immediate neighborhood of the plates. The zinc plate removes and combines with all the oxygen atoms within its range, but these will be replaced by others; by diffusion, these again by more distant ones, and so on, so we have a procession of oxygen atoms all through the liquid toward the zinc. All the atoms which reach the zinc neutralize a certain portion of its electricity by means of the charge they carry, and would so neutralize its attractive power on the charged oxygen atoms and everything would stop, but if the metals are connected by means of a wire, a channel for the escape of its electricity is provided, the circuit is completed, the electricity streams back by the wire and the procession goes steadily on. The electricity thus imparted to the copper neutralizes any repulsion it exerted on the charged hydrogen atoms, and makes them, in a similar way, begin a procession towards it, deliver up their charges to it, combine with each other and escape as a gas.

Helmholtz avoids the necessity for postulating any chemical (non-electrical) force between zinc and copper by imagining that all substances have a specific attraction for electricity itself, and that zinc exceeds copper and other common metals in this respect. He would thus think of zinc attracting not the oxygen itself, but its electric charge, and so would liken a battery cell still more completely to a Voltameter, the polarization at the hydrogen-evolving plate he would account for by the attractions of hydrogen for negative electricity, and the consequent repugnance of the hydrogen atoms to part with their charge.

It is almost certain that the hydrogen and oxygen in a water molecule cling together by reason of the attraction between their opposite charges. The atoms in an electrolyte might be likened to charged pith balls driven along by their electric charges.

[1] Read at the meeting of the American Electro-Therapeutical Association.

We must not lose sight of the fact of the two opposite processions. There can be no procession of positive atoms through the liquid without a procession of negative ones. An electric current in a liquid necessarily consists of a flow of positive electricity in one direction, combined with a flow of negative electricity in the opposite direction. If this is proved to occur in a liquid it is probable it occurs everywhere. It certainly occurs in a Holtz machine. While the machine is being turned and the terminals connected, the glass plate acts as a carrier of positive electricity for one-half rotation and negative for the other half, the one traveling forward positively charged, the other backward negatively charged.

Plates of zinc and copper immersed in air are under the same chemical conditions as if they were immersed in water. But on the one hand water is a conductor and air an insulator. Until the plates of zinc and copper are made to touch, nothing happens in either case, because the chemical tendency is uniform all over both plates, though the attractive power of zinc for oxygen is strong it would be impossible for it to combine with many atoms, receiving their charges without becoming negatively charged as to repel them electrically as much as it attracts them chemically. But directly metallic contact is effected, all the oxygen atoms at this point are swept away, and a clear passage is opened from the zinc to the copper for the flow of electricity (the slight E. M. F. at the junction need not be considered at present), an immediate rush of negative electricity from zinc to copper, or of opposite the other way occurs. The copper becomes negatively charged, the zinc positively. So far, everything goes on just the same in air as in water.

What follows depends upon the conducting power of air and water.

In water you have the atoms of oxygen and hydrogen carrying their charges; in air nothing further happens except the slight electrostatic strain into which the air is thrown by the quantity of electricity accumulated upon the metals. Sir William Thompson has demonstrated this strain by means of a charged aluminum needle, placed near such a junction. Professor Lodge would almost completely ignore the Volta contact force, and would make the effective cause of the whole phenomenon both in water and air to depend upon the greater affinity of oxygen for zinc rather than copper, and if contact force at all, it would be a contact force between metal and air.

TRUE CONTACT FORCE.

If an electrical current is passed through a homogeneous piece of metal, heat is produced. This heat being quite independent of the direction of the current and is called irreversible heat. Joule has shown that it is proportional to the square of the current strength. But at a junction of two different substances, or even a junction of the substances in two different states, as difference of temperature, besides the irreversible heat produced by resistance, there is a reversible heat produced, which changes sign with the direction of the current so that the current one way actually tends to cool the junction instead of heating it.

This is an important fact in thermo-electricity. There is no doubt that there is something at the junction of the metals helping to propel the current along, doing work in fact, and consuming its own heat in the process. The vibratory motion in the molecules is getting used up in propelling electricity. More will be said on this subject in considering Rust's theory of thermo electricity. A reversal of the current produces an extra amount of heat, which will be added to the irreversible or frictional generation of heat.

THERMO-ELECTRICITY.

Mr. Rust, of Leicester, has shown by a most extended series of experiments with couples composed of soft iron for the first, and zinc antimony for the second couple, that though the iron is almost four times a better conductor of heat than the zinc-antimony, yet the first part of the zinc-antimony is heated before the iron. The explanation is, that zinc-antimony, having fewer atoms, takes up and loses heat sooner, and in such a couple it is not the molecules of the iron swinging in friction or vibratory stress against the zinc-antimony that causes the flow of electricity, but it is the molecules of the zinc-antimony swinging in friction or with vibratory stress against the molecules of the iron, and the greater the friction and flow of molecular vibrations we can get into play, so long as there is a continuous flow, and no counter E. M. F., or drag brought about, the greater will be the E. M. F. produced. He compares the molecules of the zinc-antimony and iron to two sets of cog wheels with their cogs interlocking, but only vibrating, not revolving. The zinc-antimony cogs, moving, the sooner act upon the series of iron cogs, therefore, the faster and stronger the Z. A. cogs run, the greater the friction upon the cogs of the iron, and the greater the E. M. F. produced. In water, we saw the two processions of atoms carrying their electric charges. Of course, such a procession would be impossible here, but one could conceive a charge being passed on from one vibrating or colliding particle to another, each would receive a charge from those behind it, and hand it on to those in front of it.

Mr. Rust postulates the following theory of thermo-electricity:

"The electro-motive force is proportional to the rate of speed at which heat passes the two junctions."

He has constructed an electrical furnace which has 6,000 of such small elements, and which give in actual work an E. M. F. of 96 volts, with a resistance of 11.5 ohms. I consider the zinc-antimony in these couples loses its heat soonest by doing work, that is, by propelling the current.

Atoms vibrating about a fixed point drive electricity with them, and will not achieve any propulsion. This might be considered the condition of an ordinary warm solid. But if atoms are made to move faster in one direction than in the reverse direction, moving forward quickly and backward slowly, such moving atoms would propel electricity, the force being greater on the forward journey than on the return. One could conceive the forward vibration propelling positive electricity, the backward negative, as we have seen in the case of the two processions in water and the two currents in the Holtz machine.

I consider true contact force at the junction of two dissimilar metals or substances to be of the nature of a static strain, heat in the thermo-couple being the means of breaking down such a strain and converting static into kinetic electricity. Wherever a static strain is broken down a current is produced.

We see true contact force in insulators as well as in conductors. The striking effects of frictional electricity are due to the same cause—contact, dissimilar substances—and by their contact electricity becomes transferred from one to the other, the violence of friction being mostly necessary to aid the transfer, so

that one becomes positive and the other negative. When such a train is broken down, as in disruptive discharge, a current is produced having electrolytic effects. This has been conclusively shown by Dr. Morton, of New York.

In good conductors, such contact forces are feeble; electricity seems to slip through the fingers of a metal, as it were, and the driving force it can exert is weak, while an insulator gets a good grip and thrusts it along with violence.

The metals do not all grip electricity alike. Iron is a metal whose atoms grip positive electricity better than negative electricity; a positive current gets propelled in iron from hot to cold. Copper, on the other hand, acts similarly on negative electricity.

In the foregoing I have laid the works of Prof. Lodge and Mr. Rust under heavy contribution.

SOME POINTS IN THE TECHNIQUE OF ELECTROLYTIC EPILATION.[1]

By PLYM S. HAYES, M.D.,
CHICAGO, ILL.

THE removal of superfluous hairs by means of electrolysis was primarily devised as a purely therapeutic measure. It was only after this method had been demonstrated to be a perfect success in the destruction of hairs in entropium that this procedure was diverted from its strictly therapeutic channel, and applied to a broader field and used in what may be called a cosmetic rather than a therapeutic sense. Even if confined to the cosmetic use there is a decided therapeutic effect produced in the liberation of many ladies from a self-imposed seclusion if not actual close confinement, akin to prison life. The gloom produced from this seclusion has frequently made life a burden, and been a factor of no small moment in the development of a melancholia.

A correspondent writes that he understands that this operation is largely a mechanical one, and he desires instruction enough to know how, and then he will be able to do as well as any one. This latter statement he does not make, but from the tenor of his letter is readily inferred. The operation is mechanical, much in the same sense that the repairing of a watch is mechanical; but it is not every watchmaker, to say nothing of the broad class of mechanics, to whom we would intrust our valuable watches.

Those who first demonstrated the possibility of the permanent removal of superfluous hair by means of electrolysis, did their work so thoroughly and understood the laws of electrolysis so well, that but little has been added to the technique of the operation during the past six years.

Whether the operation is for therapeutic or cosmetic purposes, two points are to be kept constantly in the mind, namely: to destroy the hair and then see to it that you do not leave indelible proof in scars that you have done your work thoroughly.

The statement is frequently made that this operation leaves no scars. The frequent occurrence of scars in positions that tell of the destruction of offending hairs, as well as the form of the scar left, gives the lie to the statement. If this were not sufficient, then the applications that we have for the removal or modification of scars, or the completion of the work that some one else has commenced, but by reason of clumsiness has made the patient seek some more skilful operator, will leave no doubt in the minds of all that scars may result.

[1] Read at the meeting of the American Electro-Therapeutical Association.

Without entering into the detail of the operation so well understood, I will take up the points that have aided me most in making the operation a perfect success, and leaving little to be desired, unless it be that the time consumed in its performance may be abridged.

THE NEEDLE.

The history of the changes and modifications in the needle has shown that we did not have all that was to be desired in this important part of our apparatus.

Theoretically the needle should be so constructed that it will reach the bottom of the hair follicle, and come in contact with the papilla without doing violence to the tissues, and finally, to be so arranged that the current will exert its electrolytic effects only at the point of contact with the papilla. Practically this is impossible of accomplishment; but in this direction much more has been accomplished than would at first sight seem possible.

I early discovered that a blunt-pointed needle was much better than a sharp one, and a thin one than a thick one.

After a long series of experiments I came to the conclusion that steel was the only material that would give us a needle of sufficient tenuity, and yet have the strength and rigidity to accomplish the desired result.

The best material for the needle is found in the jewelers' broach, an instrument for reaming out the jewels in watches. This is ground to (so as to be of) a diameter varying from a one two-hundreths to the three two-hundreths of an inch. From the point to a space of a one-sixteenth of an inch back it should be slightly thicker than the shaft, although this bulbous joint is of advantage it is not an absolute necessity. The point of the needle is the main thing, and it should represent as nearly as possible a hemisphere. A conical point should never be used because of the danger of piercing the walls of the hair follicle.

The temper of the jewelers' broach of necessity renders the steel exceeding brittle, and it has been found of advantage to draw the temper in order to prevent breakage of the needle. This is best accomplished by taking a glass tube of about one-fourth inch in diameter and closing one end, and introducing the needle into the closed tube. This is then held in the flame of an alcohol lamp or Bunsen burner until the tube begins to become slightly red, when it is put aside to cool with the needle in it. When cold the needle will be found to have had its temper drawn so that it can be bent at right-angles and straightened again without breaking. It is still quite rigid enough for our purpose. Should the attempt be made to heat needles as thin as those described in the naked flame they will take fire and burn, thus completely destroying their usefulness. I present for your consideration, to illustrate these facts, some needles prepared as I have directed and furnished by the McIntosh Battery and Optical Company, of Chicago.

It has been with great difficulty that I have been enabled to have the needles manufactured of the diameter given in this paper. While the shape was easily obtained and the finish of the needle all that could be desired, the size was almost, without exception, from three to five times too great. Before using a needle I invariably examine it with a lens of three-fourths inch focus in order to see that the point is the proper shape. If the shape is not as it should be, another needle is selected. My experience has been that I could ill afford to work with a needle that was

not as it should be. I have found that a needle bent at an angle varying from 45 to 90 degrees from two to three-eighths of an inch from its point, serves my purpose better than a straight one. All things considered, we accomplish our best results with the thinnest needle.

(Those who have once used a needle prepared in the manner described, and as exemplified by the samples shown, will never use any other form of needle.)

THE CURRENT.

The strength of current required (for this operation) varies from three-fourths of a milliampere to a millampere and one-half, and, in rare instances, possibly three milliamperes. The strength of the current, however, must of necessity be regulated by the amount of chemical action which takes place around the needle, as well as by the amount of pain produced. In this operation the chemical action produced around the needle (the negative electrode) is a much better index than the milliammeter. In fact, the milliammeter is all but a useless instrument in electrolytic epilation.

As a rule, the less current the longer the time required to destroy the tissue, including the hair papilla. From three to six cells of the diamond carbon battery is usually sufficient.

The question has been frequently asked whether storage cells could be used. The reply is, that if three or four storage cells are connected in series for tension, the current obtained from such a battery can be used. The resistance of the tissues, of the thin steel needle, of the ordinary electrode and of the cords is so great that our milliammeter will register no greater strength of current than as though we had used the same number of Bunsen cells.

The commercial current from an Edison plant has been successfully used. The pain produced is ordinarily so great as to make its use undesirable. The Edison current has an ordinary pressure of about one hundred and ten volts. To reduce this current so that we can use it for epilation, we find that the difficulty to be overcome is that, with our present means of controlling the current, we reduce the amperage much faster than we do the voltage, and, consequently, get a current of tension which is more painful than current obtained from a battery. The results of a number of observations have led me to formulate the following:

Have as little resistance in the circuit outside of the battery as possible.

A battery with large cells and large elements is preferable to one with small elements. Two cells of a storage or galvano-cautery battery are equal to about three cells of a diamond carbon battery. Where the external resistance is as great as it is in this operation it will be found that the milliammeter will register about one milliampere for three diamond-carbon or two storage or galvano-cautery cells. It is thus readily seen that the current from the storage or cautery battery has been so reduced by the resistance of the body and the circuit, in which it is included, as to be unable to heat the needle at all. We must count the volts rather than the amperes. In the above statements, relative to the requisite number of cells of the various batteries required, it will be found that the volts in two cautery cells will equal the number in three diamond-carbon cells.

THE OPERATION.

I desire to emphasize but one or two facts rather than to give any detailed account of the operation.

Always use care in introducing the needle, and see that it follows the hair closely.

Do not carry the current so long as to produce a lesion that will form a scar on healing.

If the needle is arrested before it has entered much beyond the neck of the follicle, by reason of the size and density of the hair and root sheaths, allow the current to pass until any adhesions that may exist at the point are overcome. It would be well in this case to cause the needle to act on the tissues on all sides of the hair. Remove the hair, and the root sheaths will come with it, if the operation has been carefully done. The re-introduction of the needle in the now empty follicle is easily accomplished, and, if care is used, the papilla will be reached without trouble, and destroyed with more certainty and less destruction of tissue than as though this method had not been followed. This method is only to be used in those cases where the needle does not follow the hair to the papilla when first introduced. The re-introduction of the needle insures the destruction of a much greater percentage of hairs than where this is not done.

IN CONCLUSION,

We can state that but little that is new has been added to our methods in electrolytic epilation during the past few years. The advance in this branch has been brought about by improving the apparatus at hand rather than by the introduction of new apparatus.

In the *needle*, we note the exceeding thinness of it; the hemispherical and bulbous shape of the point, and the drawing of the temper. In the *battery*, that cells with comparative large amperage (large surface of plates) are of advantage. In the *circuit*, outside of the battery, that the conductors shall offer but little resistance; the connections be good; the positive electrode large; and that every piece of apparatus, such as a rheostat and milliammeter, that would interpose resistance, be left out of the circuit. In the *operation*, that it is advisable in many instances to remove the hair before the needle has reached, and the current has destroyed, the papilla, and then re-introduce the needle, which now readily glides into the follicle made vacant by the hair and its root sheath.

With the most approved apparatus the ultimate success depends as much upon the man as the means. Every operator leaves his record on the face of his subjects, and success or failure, as well as gratitude or regret (according to the result) is accorded to him who essays this simple yet delicate operation.

75 MADISON STREET, CHICAGO.

TWO NEW ELECTRODES.[1]

BY J. H. KELLOGG, M.D.

I WISH to bring before the Society, two new forms of electrodes for therapeutic use, which I have found of practical value, and have used quite extensively within the last year.

The first of these is a flexible, slightly adhesive electrode which is used dry. The electrode is composed of gelatine, finely powdered graphite, glycerine, and chloride of sodium. It is made as follows: Dissolve 20 ounces of the best gelatine in 10 ounces of boiling water; add 10 ounces of glycerine and 2 drachms of sodium chloride; heat, and add 10 ounces of finely-pulverized gas carbon, mixing thoroughly.

[1] Read at the meeting of the American Electro-Therapeutical Association.

To form the above mixture into an electrode, take a shallow tin pan of the size desired for the electrode. Oil the inside of the pan with vaseline. Pour in a sufficient amount of the hot mixture to cover the bottom of the pan; lay in the pan a piece of sheet lint, cut of sufficient size to allow the edges to turn up about one-half inch around the sides of the pan; pour in some more of the mixture, sufficient to saturate and cover the lint; lay in another piece of lint, a little smaller than the first, and cover this also with the mixture in the same way. A third and fourth sheets of lint may be added, if necessary. Usually, two pieces are sufficient to give the desired strength. A piece of brass-wire cloth, to one corner of which a binding post has been attached, is next laid in; add more of the mixture, if necessary, and then another piece of lint. The wire cloth and the last layer of lint may be a trifle smaller than the electrode is desired to be. Lastly, fold the upturned edges of the first layer of lint over the back of the electrode, and apply a sufficient amount of the mixture to bind them in place. When the electrode is cold, and sufficiently hardened, carefully remove from the mould. If the surface of the electrode is not perfectly smooth, it may be polished with a hot spatula. Whenever the surface of the electrode becomes roughened by use, it may be smoothed in the same way. If the electrode becomes cracked, or its surface very irregular, it may easily be repaired by applying a little of the hot gelatine mixture, and smoothing with a spatula.

This electrode is light, clean, adhesive, a good conductor of electricity, and durable. I have often had an electrode of this sort in daily use in my office for weeks without being able to detect any material deterioration in it. I find that a greater quantity of electricity can be communicated to the patient through an electrode of this composition than through a clay electrode of the same size. I attribute this to the more perfect contact between the skin and the gelatine-graphite electrode than is obtainable with a clay electrode.

I first began experiments with reference to the construction of this electrode in July, 1890; I began the use of the electrode in August of the same year, and have employed a number of them in my office since that time. From twenty to fifty applications of the galvanic current are made in my office daily, in a large proportion of which currents varying from forty to two hundred and fifty milliamperes are employed. I have constantly under treatment a considerable number of cases of uterine myoma, but I have not, since I began the use of this electrode, found it necessary to resort to the clay, or any other form of electrode in a single instance. A flexible and adhesive electrode may be made by combining red lead with the gelatine, and other substances capable of acting as good conductors.

I have recently had constructed, and have used with much satisfaction, another form of electrode, which, so far as my knowledge extends, is novel. It consists of a metallic vacuum cup, to which a binding post is attached, a moist sponge being placed inside. In use, the air is passed from the cup, causing it to adhere firmly in position, and at the same time bringing the tissues in close contact with the sponge. In the use of this electrode three advantages are gained:

1. The vacuum created in the cup establishes a condition favorable to electrical conduction. The resistance of the skin is considerably lessened by the increased vascularity induced by the vacuum created within the cup.

2. Very excellent contact is produced by the strong pressure of the moist sponge against the tissues, resulting from the exhaustion of air from the cup.

3. An intensified impression is produced upon the tissues by the combined influence of the electrical current and the cupping.

I have found this electrode very efficient in the treatment of obstinate, deep-seated pains which had resisted the long continued use of both cupping and the galvanic current employed separately. I am still studying the properties of these electrodes, and shall be able to make, at a future time, a more precise report of their value and properties.

THE GALVANO CAUTERY—ITS USE IN REMOVAL OF PILES AND GROWTHS.[1]

By EPHRAIM CUTTER, M.D., L.L.D.,

President American Branch Society of Science, Letters and Art, of London; Corresponding Member Belgian and Italian Microscopical Societies; Physician-in-chief Heartrest Sanatory, New York.

GALVANO CAUTERY is employed to remove growths without bleeding, and generally with complete and perfect cure. That is, malignant growths are not apt to recur on site of removal; they may recur elsewhere.

The tissues heal healthily, so that it is difficult at times to tell whence the growth has been removed.

PRINCIPLES.

1. Have a good battery, with freshly prepared solution or well charged. If a storage battery, test it well as to connections beforehand, and be sure it is in order before you begin.

2. It is not a good plan to do more operations than what you intend.

3 I have seen storage batteries give out during an operation. Most of my work has been done with my own primary batteries. So long as the failure of the galvano-cautery comes from the batteries I have thought it best to invent my own, so that I could be sure that the batteries were all right.

4. I have used a large battery, with about thirteen and one-half square feet of surface, with advantage. But I like best a battery which has about one-eighth of the sensitive surfaces of the former, and is operated with one pint of solution. The weight of this apparatus is less than any storage battery I have seen. Its cost is less. It can be excited more readily, and, though it is not conventional to use such a battery, so long as it has done good work I see no reason why I should not use it.

5. I use heavy conductors of pure silver. These are less bulky and more flexible than copper. I got the idea from the late Dr. Louis Elsberg.

6. Carbon and zinc plates variously connected, so as to be portable and not break; to have broad connection with as few breaks as possible.

7. It is easy enough to generate a current, but the great thing is to insulate it, and give it a good track to run in.

8. In the ordinary coupling, with screw socket, there is not a typical connection. It is very much like shaking hands with one finger of your fellow in your palm. This kind of shake makes me feel mean. But if you want to have a good, hearty, strength-conferring, whole-souled handshake, palm must join palm. Here is a surface connection broad and large. Such handshakes are pleasurable, and have a full-

[1] Read before the American Electro-Therapeutic Society, at Philadelphia.

ness, are cheery and devoid of meanness, and force is thus conferred. It is so with the connection of batteries; they should have broad surfaces coming in close contact, flatwise; in the ordinary screw coupling the contact is linear and tangential; what the writer uses is broad flat surface to equally broad flat surface.

9. *Cam Coupling.*—These I like, for they do not easily come apart. Screw couplings get loose almost invariably. The cam couplers, properly made, will hold even if dashed against a brick wall; they are easier fastened, opened, and controlled.

10. *Cautery Holder.*—Mine is very simple.

First.—A tinsmith rolled up a piece of tin into a tapering tube six to eight inches long, one-fourth inch in diameter at one end, and one-sixteenth inch at the other. Two such tubes were mounted on a glass window plate four inches long, one and a half at one end, and one-half inch at other end, by flanges of tin, riveted through the glass, or held in place by India rubber bands. The primitive tinman's appliance I have would convey more current than the brass and nickel plated one made by the surgical instrument makers.

To Use It.—Simply run the ends of the conductors into the large ends, crowding them in so as to hold. Before this application, a fine platina wire, twelve or sixteen inches long, is run through the large end of one tube out of the small end, then through the small end of the other tube and out of the large end. This wire can be fixed by simply bending the free ends outward sharply over the tube.

11. Some principles about the wire:

(*a*) It must be small. All it is good for is to burn the adjacent tissues.

(*b*) It is not an ecraseur. Platinum is not strong enough to cut tissues as iron wire does, besides it is unnecessary for it to cut.

(*c*) Simply draw it in contact with the tissue, then pass the current by a switch or, better, by dipping the plates of the battery in the solution by means of an assistant.

(*d*) Stop the current when things are getting too hot. There is no need of the adjacent parts being burnt. Besides, slow and broken applications, allow of the sealing of the blood-vessels, so as to avoid hemorrhage. Rarely do I have a hemorrhage.

(*e*) After things have cooled, draw gently on one end of the platinum wire, and take up the slack, and fix by a sharp turn over end of tube. You are then ready for another application of the current. This letting the wire cut its way by burning is much different from cutting as an ecraseur. In the method here used there is no disturbance of the adjoining parts. With the ecraseur all the surrounding tissues are drawn in, more or less, so that more tissue is taken in than needed. In the method here used there is no indrawing of tissue, and no taking more than is required. Important repetition.

(*f*) Another thing, the wire must be hot. A white incandescence is the best. Dr. Elsberg used to say that the reason why there was trouble with galvano-cautery was the wire was not hot enough. In my battery I have not been troubled by the method, which allows of unsealed blood-vessels and slow healing of parts. When the wire is at proper heat the cautery is a germicide, and seems to agree with the body tissues. This point will be brought out later.

12. The connections of the battery are so arranged that they cannot come in contact with the fluid. This is done by the battery being shorter than the plates. It is a good plan, after use, to wash cell and battery thoroughly in water, and then to dry, before restoring plates to cell.

13. Sometimes the battery will not work, though there seems to be no good reason for it, save polarization. In this case let the battery sleep over night; probably the next day it will run all right. The battery should be kept away from the dust. It takes but a little observation to see what a vehicle the atmosphere is of all sorts of morphological things; some seem to act on the battery connections as lichens on rocks. It is wonderful how little will interfere with the conductors of a battery. In the writer's latest attachment the conductors and connecting-bars of the zinc and copper are fixed so as to draw out to be polished with a sand-paper, and returned in a few minutes.

14. The fluid best for battery is saturated solution of bichromate of soda with sulphuric acid, 1 oz. to 11 ozs. of solution. *It should be cold.* The battery works best while cold.

The potash salt is used the most, as it is the cheapest, but it does not dissolve so well as the soda salt. If there was a demand for the soda salt, it would be much cheaper than the present price of chromate of potash, as sodium abounds more in nature than potassium.

Anæsthesia.—This is not always needed, as if the wire is properly heated it destroys the nerves, as it burns, with little pain.

CASES.

CASE I.—Mrs. ——; 1878. Cauliflower tumor of vagina. This was a growth with sessile base and an umbrella expansion, much like a mushroom. The site was one and a half inches within the vagina. Case had been said to be hopeless. Age, seventy-four years. The growth was removed by the galvano-cautery, so that the site was smooth and flexible as the cheek under the zygoma. There was no recurrence at site, but disease involved the uterus, of which patient died four years later; so that life was prolonged to this extent. Anæsthetic used; no hemorrhage.

CASE II.—Mr. ——; 1876. Dense piles surrounded the whole anus, which were painful and sore. Anæsthesia. Three-fourths of the periphery were burnt off with the wire. No hemorrhage. One pile, that made up the remaining fourth, was removed with the ecraseur, to see if the mode of ablation made any difference; it did make a great difference. Whereas those sites where piles were removed by the galvano-cautery immediately healed and were absolutely painless, the site of that removed by the ecraseur was painful and a long time in healing. The subject said he wished the whole had been burnt off. The piles have never returned.

CASE III.—Mrs. ——, aged sixty-five; cauliflower growth right popliteal space. Another just above the right breast. Both these were removed by the small battery, referred to above, two years ago. They have shown no signs of re appearance, and their sites are hardly discernible. No anæsthesia.

CASE IV.—Mr. ——, husband of foregoing case, seeing her growth removed so easily, at his wife's request, showed me a tumor over the spinnous process of the third cervical vertebra. It protruded like the last joint of a man's thumb; was dense and hard; not painful. I thought the battery would hold out, though I told him that it might not. It held out till the growth was nearly cut off. Then the battery had to be excited with dilute sulphuric acid. This heated it so that it did not work very well, and I was not so

well pleased as in his wife's case. Still the case did well. The site is almost invisible, flexible, and there is no disfigurement by a scar. No hemorrhage. No anæsthesia; had I been prepared for this case it would have been more expeditiously performed.

CASE V.—Mrs. ——, aged seventy-eight years; 1879. A hard, angry-looking tumor of the size of a split pea on the right upper eyelid. It was mobile and somewhat painful. This was removed by the small battery. No anæsthesia. It healed up so well that there was no scar or mark to indicate its presence in two weeks. Considering the age of case and the location, it seems as if this was good surgery. Her son, a boss joiner, said afterwards that he considered it a pretty nice piece of carpenter work. I was assisted by my son Dr. John A. Cutter, then in college. No assistance in cases III and IV, which were operated upon in a country village in Connecticut.

CASE VI.—Capt. ——, aged sixty years; 1891. A small growth on chin, ugly looking and increasing in size. Operated upon in office, assisted by my son. Small battery used. Cocaine anæsthesia. Three weeks later, case called in my absence, and my son reports that he could find no scar or trace of operation.

CASE VII.—Miss ——, aged forty-two years; 1891. Operated upon at Heartrest Sanatory, assisted by my son. Voluminous and sensitive piles. Patient came under ether badly. Had to give chloroform before anæsthesia was effected, and then patient tumbled and kicked so as to interfere with operation seriously. This was not done to entire satisfaction, still the final result was good and the parts resumed normality.

CASE VIII.—Mrs.——, aged 45 years; 1882. Cancer of left groin. Was assisted by Dr. William G. Wheeler, of Chelsea, nature's nobleman. Tumor large as a hen's egg. Anæsthesia; operation difficult because of its sessile nature and cancerous lymphatic glands of the groin. Still I succeeded in removing it, and the upper margin of cavity contracted so much as to cover the burned area well. It healed well. But the disease recurred in right Poupart's ligament and womb, and destroyed life.

With these few cases I close this paper, trusting that the Fellows of the Society will another year report more cases. It seems to me that this operation is almost an ideal one for piles and small growths.

THE ARISTON, BROADWAY AND 55TH STREET, NEW YORK.

INTERESTING CASES OF ABDOMINAL TUMORS.[1]

BY M. PRICE, M.D.

MRS. R. [Dr. Keller's patient], suffering from sarcoma of the left ovary. She has complained only for the last nine months, has rapidly lost flesh, and continuously enlarged from encysted peritoneal dropsy.

She gave a history of a tumor, and spoke of it as dropping from the right side to the left. The appearance of her face was that of one suffering from ovarian disease. There was in her diseased condition indications of more serious complications.

June 14 we operated for the removal of the diseased condition, and found encysted dropsy and sarcoma of the left ovary as large as a child's head, and as the hemorrhage was so great from a slight examination, it was thought best to remove it, and it was done in as perfect manner as possible. The ligature of the pedicle controlled the hemorrhage perfectly; thorough washing of the peritoneal cavity; a drainage-tube at the lowest point from which the tumor was taken; careful closure with simple dry dressings completed the operation. The tube was left in four days; the patient made a rapid recovery from the operation.

I expect this poor woman to have her disease return, and that very soon, and could I have been perfectly sure of what the trouble was, I would not have operated. But when we do undertake anything for their relief, let us at least leave them in as good condition as we found them, and not with dangerous hemorrhage to destroy them in an hour or so, and all because we have not the courage to complete an operation we had the assurance to begin.

Present: Drs. Jos. Price, Morris, Murry, and Keller.

This patient was examined on the 25th day of October; she is perfectly well and doing her work, with no indication of a return.

Mrs. J. T. [patient of Dr. Hutzell]; this young woman, twenty-one years old, has been suffering for eight years from a complication of diseases which culminated in an operation for her relief. When she was fifteen years old she had a discharge from the navel of pus and hard calcareous matter; this discharge lasted some two years; she has not enjoyed a single day of perfect health for the last seven years, but has for the most part done her housework and assisted her husband in his laborious business for the last year, with a condition of things in her pelvis that is hard to imagine any one walking about with, much less work. She only submitted to an operation because Dr. Hutzell told her nothing else would help her to get well. Examination of the pelvis indicated pus and a general adherent condition of all the pelvic contents, so that I did not expect an easy removal of the diseased condition, but I was not prepared for such an uphill undertaking as I found was necessary for the relief of this most distressing case.

After the usual opening of an inch and a half, I found the pelvis blocked with a peritoneal cyst with dark and bloody contents; this was emptied and the contents of the pelvis at once investigated. Both tubes were diseased; the left with more than a pint of offensive pus, the right two or three ounces of pus, both adherent to all the surrounding viscera. The enucleation was most difficult from start to finish. In addition to the pelvic disease and the peritoneal cyst, there was a collection of large hard concretions, some of them as large as a walnut, completely covered by folds of the bowels and the peritoneum.

In the removal of these concretions there was an additional risk to the patient, they had to be removed from their bed.. The bowel folded around them so that it was difficult to tell where to begin without opening the bowel. The effort for their removal consumed considerable time, but all were removed that could be found. Perfect irrigation of the entire abdominal cavity after most of the adherent bowels were torn apart. I say most of them, for it was impossible to complete the separation; they were so well formed that I considered it unsafe to do so much tearing in this complicated condition of affairs. Thorough washing, with the drainage-tube in the most depressed portion of the pelvic cavity, a complete toilet, and the patient put to bed. Time of operation, forty-five minutes.

She was by all odds the best patient I have had the pleasure of treating. She made a perfect recovery after one week of drainage, with not a single complaint from beginning to end.

[1] Read at the Philadelphia County Medical Society, October 28, 1891. For Discussion, see page 410.

Dr. Jos. Price's hospital, 241 North Eighteenth street, June 10, 1891.

Examined on the 26th of October; perfectly well; no pain; able to do all of her work with perfect comfort.

Supra-vaginal Hysterectomy.—Miss W. R., aged forty years, suffering from a rapidly growing hard tumor on the right side, filling the pelvis. The cervix high to the right and above the brim of the pelvis and a hard body the size and shape of the uterus. The tumor movable, all but the pelvic portion, which was apparently fixed. The patient was only aware of a lump in the side during the last two or three weeks prior to operation; she was sure it was not there a month. When I examined her the day before the operation, the tumor was as large as a womb at the seventh or eighth month of pregnancy, and nodular. She was incapacitated for work, and it was decided to remove it as its rapid growth indicated malignancy.

July 9, with the assistance of Drs. Jos. Price and Morris, I removed the entire uterus and appendages, and left nothing but the cervix clamped by the Delta metal wire nœud, with dry iodoform dressings to finish the operation.

The tumor was a most interesting one, and in a great measure explains the history the woman gives of its rapid growth. In the pelvis there were three fibroids with all the pathological characteristics of tumors of that nature; the cervix to the right and high up, and the uterine canal not over three inches long, enclosed by the large tumor to the right of the uterus, and front and back of it one of the little fibroids.

The large tumor was entirely different in all of its pathological appearances, and when opened had a distinct capsule, and when the capsule was opened widely gaped as if there were great pressure from within pushing out the muscular tumor, or I have no doubt a malignant and rapidly growing tumor inside the capsule.

Examined by Dr. Bigelow: spindle-cell sarcoma.

Examined October 28: at work, free from pain and in good health.

Miss M. D., aged thirty-two years, suffering from left ovarian tumor with myxo-sarcomatous contents. This young woman was accused of being pregnant by several well-known doctors who had treated her for several months. Patient submitted to an operation to remove the suspicion of her unchastity. Operation was an easy one, and she made an uninterrupted recovery. Weight of tumor, twelve pounds, with contents.

Obstruction of the Bowels by Gall-stones.—Mrs. M., aged forty-five years, was taken on September 13 with slight pain in the right side of the abdomen; on examination it was thought the area of dullness over the liver was considerably enlarged; had no increase of temperature or pulse. An effort was made to move the bowels, which was persisted in until the 17. During this time ten calomel powders were given, four Seidlitz powders, two bottles of citrate of magnesia in divided doses, two ounces of Epsom salts, one drop of croton oil. There was no vomiting and no increase of pulse or temperature. The patient's condition was up to this time good; but a very anxious expression of the face was beginning to appear, and she wished something done for her relief.

Pulse beginning to show signs of weakening; no tympanites. At this time we thought something radical must be done to relieve the obstruction of the bowel. Gall-stone was not suspected. Ether was given. An opening directly over the region of dullness, two inches in length, was made, when a greatly distended gall-bladder was at once discovered; tapped, and the contents drawn off, which was a clear, gelatinous fluid; had none of the characteristic appearances of bile. The gall-bladder was examined, and two large and one small stones removed.

The direct cause of the obstruction of the bowel was the pressure made by the distended gall-bladder, with the gall-stones laying on the transverse colon. This pressure was made possible by the distention of the gall-bladder as it enlarged and was pressed backward by the abdominal wall, making pressure on the colon, and causing the obstruction, which was as complete as any I have ever seen.

Drainage-tube placed in gall-bladder, which was securely stitched in upper angle of wound; two sponges had been placed in the peritoneal cavity to protect it from the discharges; these were removed, and thorough irrigation of the abdomen was made. Silkworm-gut sutures; closure of the wound; dry dressings and bandage. The effort to move the bowels was continued until the third day after the operation, when a slight movement was obtained; flatus passed freely. On the fourth day there were free purgations after large and repeated doses of Epsom salts, both by the mouth and by injection. Injections were also used freely before the operation, as well as all the other treatments. Calomel powders every twenty minutes; one dozen or more given. Patient made a most beautiful recovery and is now able to attend to her home as before.

Mr. G. C., aged forty-six years [Dr. Prendergast's patient], had been suffering for a long time, when making unusual exertion, with pain in the region of the head of the colon.

Four days before operation, while at Atlantic City, was taken with very severe pain in the abdomen; on his arrival at home his physician gave him small doses of mild chloride and soda, followed by Rochelle salts. He was freely purged, and all the urgent symptoms relieved; but he still complained of pain at the head of the colon. After a careful examination, Dr. Prendergast decided that his patient was suffering from appendicitis or abscess at head of colon. Patient had quick pulse, subnormal temperature, distended abdomen, anxious countenance, and was a very sick man. At this time I was called in consultation, it being the evening of the fourth day of his disease. An operation was advised and consented to by the patient.

On August 29, at 8 A. M., ether was given. An opening, one and a half inches inside of the crest of the ilium, directly over the area of dullness down to the abscess cavity, was made, and from four to six ounces of pus and feces were discharged. The appendix was folded back, and to the outside of the colon, almost entirely separated from it by ulceration. The parts seemed to be so soft and gangrenous in appearance, that I thought it best to leave everything in position, use irrigation, two rubber drainage-tubes, and pack with gauze; but when I washed out the cavity I found that the slight barrier that had separated the abscess from the peritoneum had been broken, the intestines protruding through the wound. I at once decided to wash out the peritoneal cavity and use glass drainage into the pelvis, and dress the external wound as above stated. Three stitches were applied, but two were cut away that evening. Patient was freely purged the night before the operation, and began purging on second day, and continued naturally, four or five movements per day, until the fourth day; after that salines were given to keep the bowels free.

Patient made a beautiful recovery. For this result I am greatly indebted to his physician for his untiring care and attention and good treatment before, during, and after operation.

Mrs. J. W. H. [patient of Dr. C. H. Dunham, of Trenton, N. J.], suffering from extra-uterine pregnancy. Operation October 14, 1891. Recovery.

August 1 was taken with very severe pain on left side, accompanied with diarrhœa; she was four days over her expected period; while at stool felt severe pain in lower left side of abdomen, and immediately became sick at the stomach and faint. Her period made its appearance at this time and continued for three weeks. This is her statement of her condition. She was attended for nine weeks by a practitioner unknown to me, and had frequent recurrences of her first attack. When Dr. Dunham was called to her assistance, she was having daily chills with other symptoms of peritonitis; also a tumor filling the abdomen as high as the umbilicus. At this time Dr. Dunham telegraphed me he had a case of extra-uterine pregnancy, and asked me to come prepared to operate. I went to his assistance October 14, and found the patient in bed, perfectly comfortable, without any indication of trouble, owing to free purgation which the doctor had given her preparatory to operation. The increase of pulse and the tumor remained as proof of the correctness of the diagnosis.

A small incision was made in a thickened and much changed peritoneum, immediately on the opening of which great quantities of very offensive blood was discharged from the abdomen. Instant search for the impregnated tube was made, brought up, and ligated. Thorough irrigation and drainage; the latter was continued for four days. Great, broad flakes of inflammatory lymph were removed from this cavity. At the time of operation there was a distinct inflammatory diaphragm extending from crest of ilium to crest of ilium, leaving a large cavity lined with this product, which would not permit the internal viscera to return to their place; this cavity was filled with boiled water. Not a single bad symptom; an uninterrupted recovery.

Married two years; no children.

Mrs. A. G. B. [patient of Dr. C. H. Dunham, of Trenton, N. J.; his second case of extra-uterine pregnancy in five days], suffering from extra uterine pregnancy. Operation October 19, 1891. Death.

Patient is thirty-six years old; has three children; eight years between first and twins twenty months old. She passed one period August 8, and September 6 had a slight discharge, pale in color. One week later had severe hemorrhage, with pain and symptoms of miscarriage; persistent diarrhœa with sick stomach; felt weak and faint. A rupture at this time had unquestionably taken place; hemorrhage continued with recurring attacks of pain. The doctor had made his diagnosis early in the case; but free purgation had so relieved her that he was persuaded to delay; but her condition continuing to grow worse—pulse 130; temperature normal; patient very pale; a decided boggy feeling in the pelvis, and hardened masses in the abdomen—decided him to have an operation, and he asked me to see her, and operate at once. Through a small incision I opened the peritoneum. The abdomen was full of fluid and clotted blood to the diaphragm; no odor; no indication of peritonitis. I immediately removed the impregnated tube, which was on the right side. The fœtus was also found by Dr. Dean, of Spartanburg, S. C., who was assisting us. The blood-clot was adherent to every portion of the peritoneum, and to the anterior and posterior face of the omentum. It could not be removed by flushing or scraping. A large conical clot, as large as my two fists, extended down by the rectum. All the clots and free blood that could be washed out, using three large pitchers of water, were gotten rid of. After free irrigation the peritoneum had anything but a comfortable appearance, as it was perfectly black from adherent blood clot. There was no odor to the blood, no apparent chemical change having taken place. As to the purging in these cases, I have no doubt it is from the pressure of the clot on the rectum. The absorption of most of the fluids and saline constituents of the blood may have some effect to increase the diarrhœa. The tenesmus and straining at stool unquestionably increases the loss of blood, greatly increasing the danger of the patient.

A seven-inch drainage-tube was left at the lowest point of the enucleation, and the top of the tube just reached the abdominal wall. Boiled Trenton water was used for irrigation, and about one quart was left in the peritoneal cavity. Twenty-four hours after operation the pulse was 120, and temperature 101½°. Heart-clot feared, otherwise patient doing well.

Death from heart failure three days after operation; patient was too comfortable to do well from the beginning.

RETENTION OF URINE CAUSED BY MULTIPLE URETHRAL CALCULI.[1]

By J. V. PREWITT, M.D.,
WEST POINT, KY.

I AM somewhat at a loss to know just how to present this subject of Urethral Calculi before you in the most profitable manner, unless it be to report a case which fully illustrates a pathological condition seldom met with, even by specialists, namely, urethral calculi formed in the urethra.

Urethral calculi are always formed of some of the constituents of the urine, which become precipitated under certain varying conditions, with the exceptions of the nucleus, which may be in addition to a urinary constituent. A foreign body which has been introduced into some part of the urinary tract from without, or a piece of normal or pathological tissue, or a mucus or blood coagulum. Among the foreign substances which have formed the nucleus of urinary calculi are pieces of bougies which have been broken off in the bladder or urethra, bullets which have found their way into the urinary tract; also, pencils, beans, and peas, which are often introduced into the urethra by children. Any change in the system which causes an increased formation of any of the slightly soluble constituents of the urine favors the tendency to the formation of calculi within the urinary passages, since they do not find sufficient amount of urine to hold them in solution. The substances which are liable to be formed in excess and to become constituents of urinary calculi are uric acid and acid urates, calcic oxalate, cystin, and, very rarely, xanthin. The constituents of urinary calculi most frequently met with are urate, oxalate, phosphatic, and cystin concretions. Urinary calculi may be formed in any portion of the urinary tract from the renal tubules to the meatus urinarius. The commonest place, or places, is the pelvis of the kidney and bladder.

CASE I.—Winfield S. G., aged thirty years; occupation, farmer. Fifteen years ago he was kicked on

[1] Read before the Mississippi Valley Medical Association, St. Louis, October 18, 1891.

the penis by a horse. Some blood was passed for a few days. A few months later he observed that the stream was very much diminished in size, and had a desire to micturate much oftener than usual. Four years after the kick he began getting up at night three to four times to void his urine, and continued to grow gradually worse. For the past ten years he has been troubled more or less with retention of urine, and, at times, voided it by drops. He suffered no pain, had never passed any gravel, and no history of renal colic; but has complained for the past eight years of a hard swelling, which gradually increased in size, in the perineum, extending from the anterior aspect of the sphincter ani well forward through the scrotal region. There was some twisting of the stream and sudden stoppage, and a few drops of mucus would pass just before the urine. These were all the symptoms manifested.

October 9, 1890, he went to bed, suffering with retention of urine, voiding it a few days previous by drops.

October 29 (twenty days later), I was sent for by the attending physician. He had been treated by all of the physicians in his section of the State for chronic cystitis, nephritis, etc. Each year he raised a large crop of tobacco and corn. During the year he would be laid up three or four times, suffering with retention of urine, which would get better in a few days, and he would return to work. Upon an examination I found a close stricture, one inch and a fourth back from the meatus urinarius, and the urethra recently ruptured at the bulbo-membranous junction, and the large amount of the long-retained urine greatly infiltrated the surrounding tissues. The scrotum presented a cylindrical appearance, being near the size of a gallon vessel, and the perineum bulging out very much. He had just gotten over the second uremic convulsion as I got there. I repeatedly failed to pass the stricture with sounds, and even with a filiform bougie. I then passed a probe to the seat of stricture, using but little force. I found a hard substance just back of the stricture, but no click, owing to the dense cicatricial tissue. I then made a probable diagnosis—calculus—but was not positive. The patient was placed in the lithotomy position. Dr. R. Tidings administered the chloroform. The staff was introduced with the groove looking toward the surface and brought carefully into contact with the stricture, and a median incision made down to the guide, just anterior to the stricture. I then extended my incision in the median line toward the perineum, parting the stricture and exposing the first calculus, which was imbedded to some extent in pus. The escape of the urine came with a gush as I parted the stricture. The excision was extended, owing to the fact that I was unable to extract the first two calculi with the forceps. One finger was introduced into the rectum, and by manipulation I succeeded in evacuating the urethra of eighteen facetted calculi, occupying almost the entire extent of the canal, weighing 403 grains. The three first calculi are round, and just filled the urethra, which has been probably dilating its walls for the past three or four years. From the specimens you see they all have facets, and are joined together very completely.

As to treatment, there is no question as to what should be done, but how it can be best attained. The operative procedure must depend largely upon the peculiar feature of each individual case. If the stone is small and the urethra of comparatively normal caliber, it can be removed by the use of Gross' long urethral forceps, or the ordinary long uterine dressing forceps. In case the stricture is very close, it should first be gotten rid of by some of the recognized operations. If the calculus is in the deep urethra, it may be deemed advisable to dislodge it, forcing it back into the bladder, where it can be dealt with according to the fancy of the operator. Various instruments have been devised for the removal of foreign bodies from the urethra; but such an occasion to use such instruments comes but a few times in the life of the general practitioner. He rarely has at his command such an appliance, and such instruments are of service only when the stone is small and the urethra normal. Obviously, such methods as above suggested are not applicable to the case under consideration. From the size of the stone, the number, and the condition of the urethra and peri-urethral tissues.

When the diagnosis has been made of calculi in the urethra, I would most assuredly, in a majority of cases, introduce the staff into the urethra, making an incision down to the stone, and remove it.

The case mentioned above made a good recovery, and the patient raised a large crop of tocacco and corn this year.

THE SIMPLE EXTRACTION OF CATARACT.[1]

By EDWARD JACKSON, M.D.,

Professor of Diseases of the Eye in the Philadelphia Polyclinic and Surgery to Wills Eye Hospital.

THE old flap operation for the extraction of cataract, when it was successful, was one of the brilliant triumphs of operative surgery. The trouble with it in the old time, before the day of Graefe, was, that it was successful in only a minority of cases. The real achievement of the last few years with reference to it, has been the increasing of the percentage and the perfection of its successes, until they have surpassed anything achieved by other operations for cataract extraction. This has been brought about by collateral advances in medicine and surgery, that have given us an understanding of sepsis and asepsis, of the myotic power of eserine and its allies, and of the anæsthetic and other powers of cocaine.

My purpose in this paper is to discuss the operation of "simple extraction" as I practice it, with the reasons for choosing certain procedures rather than others, and some comparison of the results of the method with the modified linear extraction, or modified Graefe method, which it has largely replaced.

The Corneal Section is made upward, namely because it seems to me that the wound in this position is much better protected beneath the closed lids from either infection or the relative displacement of its lips than the downward section can be. It is made in the clear cornea, sometimes as close as it can be to the limbus without encroaching on it. It is parallel to the corneal margin, the plane of the knife making it being parallel to the plane of the periphery of the iris. It is made to include nearly, and sometimes quite, half of the circumference of the circle of which it is a part. The exact position of the section and its length are determined by the size of the cornea and the supposed size of the lens. The plane of the section should be well in front of the iris, for the risk of prolapse of the iris is thereby greatly lessened, yet the incision must be long enough to permit the escape of the lens. The section is made with the knife de-

[1] Read at the Philadelphia County Medical Society, October 28, 1891. For discussion see page 413.

scribed by me in the *American Journal of the Medical Sciences* for March, 1888, for the reasons there given, that it combines to a large extent the manageableness of the Graefe knife with the smooth incision of the Beers knife. Usually the incision is almost completed by the forward trust, the cutting edge being carried by it out of the anterior chamber, and the remaining bridge of corneal tissue severed as the knife is withdrawn.

The Capsulotomy is made with the point of the knife used in making the corneal section, and is about in the plane of the corneal section, as the lens lies against the cornea after the escape of the aqueous. I have in a few cases opened the capsule before completing the corneal section, as the point of the knife was carried across from the puncture to the counter-puncture. This was done in the fear that after the escape of the aqueous, the pupil would contract so that it would be difficult or impossible to make a sufficient laceration of the capsule without wounding the iris with the knife-point. Such a manœuvre, however, required a slight change in the direction of movement, and prolonged a little one of the most critical periods of the operation. It was given up on finding that a sufficient opening in the capsule can always be made through the pupil after the completion of the corneal section. The opening that it is necessary to make in the capsule is really quite small, a slit four or five mm. long is quite sufficient, probably because, when the solution in the continuity of the capsule is once started it extends quite readily, as widely as it is needed, under the pressure of the lens during the stage of its delivery.

The advantages of this method of opening the capsule are that by it we get rid of one instrument, the cystotome—an instrument hard to keep clean at the shoulder from which the pricking point projects, hard to get and keep perfectly sharp, liable from its shape to catch and damage the cornea or iris in case of sudden movement while it is in the eye, and which I have seen more than once, by its direct backward pressure, dislocate the lens and allow the escape of vitreous. Then, the small opening in the capsule nearly in the direction of the corneal section, seems to have a decided influence in making sure of the proper rotation and presentation of the lens in the corneal wound; and cortical matter as well as nucleus has a perfectly direct avenue of escape; and if cortical matter remains after the nucleus has been extracted, it remains inside the capsule, and not in the anterior chamber where it would exert its well-known deleterious influence on the iris; or, as some have supposed, furnish an especially favorable culture medium for the pathogenic bacteria introduced on the shank of the cystotome, or along a path of capsule incarcerated in the corneal wound. Again, with this method of opening it, there is no chance that portions of the capsule will prolapse or become incarcerated in the wound, and so complicate the healing and endanger the ultimate result more insidiously, but quite as seriously, as prolapse or incarceration of the iris.

This method of opening the capsule has this disadvantage, that when the pupil contracts, as it does in the process of washing out the anterior chamber, the iris sometimes entirely covers up the rent in the capsule, and makes it much more difficult to dislodge any remaining cortical matter. Under these circumstances, it is best to make no effort to dislodge it, for, in my experience, cortical matter *left within the capsule* after the removal of the lens nucleus is innocuous, and is certain to be removed by absorption in a few weeks at the furthest, causing some delay in the full restoration of vision, and detracting from the brilliancy of the operation, but in the end giving the patient the best result.

The Delivery of the Lens is effected by making pressure with a lens spoon backward on the lower portion of the cornea, and with a corneal spatula slightly downward upon the upper ciliary region, causing the lens to push into the pupil and engage in the corneal wound, the movement of the lens being steadily followed by a slight upward movement of the spoon, and the necessary pressure never relaxed until the greatest thickness of the lens had passed through the corneal section. It is of the utmost importance that the pressure be maintained steadily; any intermitting of it that causes the lens to alternately advance and retreat is liable to bring about the displacement of the lens, and the presentation of the vitreous in its stead. After the nucleus has escaped, the pressure is gently continued until any evident masses of cortex have also been extruded, and then withdrawn.

Washing Out of the Anterior Chamber I have practised after the method and with the apparatus of Dr. Lippincott, of Pittsburg, for the last year, as the principal step in the operative toilet. If the iris has prolapsed, the stream of boric acid solution is the simplest and best repositor, its effect being to carry the iris into position, and at the same time to provoke a marked and very satisfactory contraction of the pupil. If the opening in the capsule remains freely accessible, the current may be directed into it and all lenticular *débris* removed. But if this is not readily accomplished, I content myself with a thorough washing out of the anterior chamber, at the end of which the pupil is found small and central, stroking of the iris with the spatula, or poking into the angles of the corneal wound to dislodge incarcerated iris or capsule, being thus dispensed with.

Eserine is Instilled after the washing of the conjunctival sac, although usually the effect of the irrigation of the anterior chamber has been to already secure a small central pupil, in order that this contraction of the pupil may be maintained and the iris drawn as far as possible away from the cornea. In a single case in which I omitted the use of eserine, a slight prolapse of the iris appeared at the end of thirty-six hours. Eserine was then used, and the prolapse promptly reduced. Later, however, it again appeared, and the pupil was left somewhat distorted.

Simplicity.—As compared with the Graefe method and its modifications, "simple extraction" deserves its name, in that the iridectomy that it dispenses with is the most painful and one of the most delicate portions of the former operation, and that the uninjured iris is more readily reduced and kept wholly within the eye than the iris that has lost the tensile action of its sphincter. It prevents the extremely insidious accident of incarceration of the capsule. Again, the dangers of that serious complication, prolapse of the vitreous, are reduced to a minimum. Without rough handling, or especially unfortunate movement of the eyeball, it is scarcely possible for this accident to occur before the nucleus is delivered. Even in a case of dislocated lens with fluid vitreous the delivery of the lens was readily effected without the use of a spoon or loop, and no vitreous was seen until this had been accomplished.

Ease.—The statement is usually made that with simple extraction the delivery of the lens is slightly more difficult. But, in my experience, this is true only to a slight extent as to the complete removal of the cortical matter. The delivery of the nucleus is

not, to any notable extent, more difficult. I operated yesterday on a case where the lens was particularly large and the cornea small. From the other eye, in which the conditions were precisely similar, I had removed the lens several months ago, after a preliminary iridectomy, with a good deal of difficulty. The simple extraction was, if anything, the easier one. After the first operation a considerable amount of cortex remained in the capsule, and the same thing occurred with the second. Still, the removal of all remaining cortex is, I believe, a little more difficult after the simple extraction, though certainly not more dangerous.

Prolapse of the Iris.—The danger of this complication is the greatest drawback on simple extraction—about all that keeps it from being an ideal operation. When any considerable prolapse occurs it causes a distorted pupil, is liable to delay the healing, is followed by unusually high astigmatism, and if very large might endanger the eye. The impression is abroad that it is very much more likely to happen after simple extraction than after extraction with iridectomy, at least, it is scarcely counted as one of the risks of the latter operation. But iridectomy does not prevent the occurrence, except of the part of iris that has been removed. Indeed, in so far as it removes the restraining influence of the iris sphincter and leaves angles of iris floating within the eye, iridectomy directly favors incarceration, the form that prolapse assumes after it. Knapp has recently reported statistics of about 500 cases of simple extraction, with pralapse of the iris in 8 per cent. of the cases. It is probable that incarceration of a part of the iris at the angles of the wound is about that common among Graefe's extraction. In my own work prolapse has not been more common after simple extraction than was incarceration after iridectomy. More than this, the great mass of cases of prolapse under the use of eserine flatten down and cause as little trouble as the incarcerations after iridectomy, and do this without excision or any other special treatment, without notably delaying the healing, and so far as can be judged without any additional ultimate danger to the eye. I speak thus particularly about prolapse of the iris, for it was fear of it that kept me for a considerable time from giving up iridectomy. Still, prolapse of the iris is the chief danger of the method, and it should be carefully guarded against by the use of eserine, by keeping the patient as quiet as possible, by avoiding any pressure of the dressing or through the dressing on the globe, and by placing the corneal section as far away from the iris as possible, compatible with making it large enough to permit the escape of the lens.

Visual Acuteness.—The principal advantage of the simple operation is the exclusion from the eye of a large amount of very imperfectly focussed light, and the retention of the power of adapting the eye promptly and fully to the varying intensity of the light to which it is exposed. This advantage, although shown partly by statistics of visual acuteness, can never be fully exhibited in that way. An eye may be able to decipher even the smaller test-types, although their image on the retina is engulfed in a flood of unfocussed light coming in through distorted portions of the cornea opposite the coloboma left by an iridectomy. But even with only the ability to make out the same type, the vision secured by the exclusion of this useless and confusing excess of light is for all practical purposes far superior.

Again, we find in age the retina habitually guarded against even the light admitted to the younger normal eye by a diminished pupil; and the reversal of this, the flooding of the senile eye, with its slower nutritive processes, with an amount of light largely in excess of what it has been accustomed to, especially the crippling of its power to defend itself against sudden increase of illumination cannot but diminish its power of resistance to unfavorable influences, and lead to ultimate deterioration of vision.

It was watching the gradual deterioration that occurred in certain eyes that had been subjected to extraction, with iridectomy, that first made me desirous of trying the simple method.

Indications for Iridectomy.—I am not aware of any operator who proposes the abandonment of iridectomy in all cases. It is pretty certain that in at least one class of cases all will continue to practice it, namely, those in which from iritic adhesions or from other causes the pupil is extremely rigid and undilatable. The other indications for it are not so well agreed upon, but probably one of the most important of them is extreme restlessness and insubordination on the part of the patient. All of my cases of prolapse have been in patients markedly of that character. For the present most of us will be apt to fall back on iridectomy for a number of reasons, as I did in a case about a week ago where there was reasons to suspect a large lens and saccharine diabetes, so that I feared sloughing from a large corneal flap. But with myself, as with many others, the present tendency is to do iridectomy less and less frequently, and it is probable that the cases in which it is either necessary or desirable will ultimately be found to be few and far between.

Society Notes.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, October 28, 1891.

The President, JOHN B. ROBERTS, M.D., in the Chair.

INTERESTING CASES OF ABDOMINAL TUMORS,[1]

WAS the title of a paper by DR. M. PRICE.

DISCUSSION.

DR. B. F. BAER: I have been much instructed and interested in this report of the cases of Dr. Price, and I was especially interested in the case of sarcoma. I have had five cases of fibro-sarcoma, and in none of these cases has the disease returned. One was operated on two years ago, another a year and a half ago, and the others at a more recent period. These were solid tumors. One weighed fifteen pounds, another nearly that, and a third five pounds. They were surrounded by peritoneum, but there were no papillary growths. I would infer from the report that in the case of Dr. Price the tumor was breaking down and papillomatous.

I have recently had a rather rich experience in regard to difficulties in the diagnosis of pregnancy. The most difficult operations that I have done in the last two years have been done in the past two months, in neglected cases diagnosed as pregnancy. One was a case of poly-cyst of the ovary, in which the physician was so certain of his diagnosis that the pains of which the patient complained were regarded as labor pains, and on two occasions the bed was made up for the accouchement. When the patient

[1] See page 405.

was *in extremis*, it was decided that she was not pregnant. In this case the adhesions were frightful, and the operation was very difficult.

The second case was operated on a week ago, and the tumor weighed about sixty pounds. The patient was thought to be illegitimately pregnant, and was sent to this city two months ago, to be confined away from home. She went down hill very rapidly. Two or three of her physicians thought that she was pregnant, but in this instance, as well as the first, the mistake was due largely to carelessness. They took it for granted that she was pregnant, and did not examine carefully. She was the weakest patient on whom I ever operated. There were firm adhesions to the liver, and I think a piece of the liver was torn off. The adhesions were universal, and the tumor was removed with difficulty. So far the patient is doing well.

DR. JOHN C. DA COSTA: I might speak of one recent case of interest in the matter of diagnosis. The patient was a woman forty-six years of age, who presented the symptoms of fibro-cystic tumor of the uterus. The only point against this view was the comparatively rapid growth of the tumor. There were two or three able men with me at the time of the operation. I found two tumors. The first one was enucleated, and seemed to be a true fibroid. The second looked like a fibro-cystic growth; but when it was cut open it was found to be a fibro-sarcoma. Hysterectomy was then done, and the uterus was found to be filled with sarcomatous tissue, although there had been no evidence of uterine sarcoma. Here we had three different conditions, two malignant and one non-malignant, but capable of change—sarcoma of the uterus, fibro-sarcoma, and fibroid.

DR. JOSEPH HOFFMAN: A point brought out by Dr. Da Costa's remarks is that a deferred operation is a dangerous one, because in all of these growths, especially those of a fibroid nature, degeneration is apt to go into something malignant. Sarcoma may take any form known to pathologists. Delay is, therefore, dangerous, and the idea of melting out tumors which are already practically on the road to malignancy by any means except radical removal, is foolish, and not supported by the clinical facts. I know of one case of mistaken diagnosis of pregnancy for ovarian tumor, by which, after a very minute examination, the woman was put in the Episcopal Hospital, and allowed to remain three or four months in order to confirm the diagnosis, although the diagnosis had been made. Where the uterus can be felt outside of a fibro-cystic tumor, I do not see how a mistake can be made. In obscure cases it is better to see what we are about by an exploratory operation than to make a diagnosis and hold on to it until time shows that we are wrong.

DR. WILLIAM E. ASHTON: The danger of fibroids undergoing malignant change is an argument in favor of their early removal. In the majority of cases, however, it is impossible to urge early operation, on account of the past education of physicians. We have been taught that fibroid tumors are of an innocent nature, and that when the woman reaches the menopause she will undergo certain changes which will result in the patient's recovery. I find, however, that the vast majority are not affected by the change of life. I think that in most cases in which oöphorectomy has been done in the hope of bringing about an early menopause, the results have been unsatisfactory. Another point is that a large number of these cases have diseased appendages. Many of these cases suffer pain, and this has been ascribed to pressure; but I think that this pain is due, in many instances, to localized attacks of peritonitis due to the diseased condition of the appendages. Taking into consideration the fact that there is danger that the growth will become malignant, and the fact that the appendages are usually diseased, I think that it is the duty of the profession to educate the coming physician in regard to the necessity of the early removal of fibroids.

Dr. Price, in his case of appendicitis, refers to the adhesions being frail, and not trusting them. I think that if there is any doubt as to the pus being excluded from the peritoneal cavity, we should not hesitate to flush the abdominal cavity, and drain. In a case on which I operated some time ago, and in which the head of the colon was ulcerated through, I had the same difficulty. I got into the abdominal cavity and found pus. With thorough irrigation and drainage there was complete recovery.

DR. ERNEST LAPLACE: I was interested in the apparent triple nature of the growth in Dr. Da Costa's case. A word or two will explain this. The growths started as fibroid tumors. The life of this fibroid tissue may be longer or shorter. As soon as it dies it disintegrates and softens. The apparently triple nature of the lesion was due to the growths being of different ages. The growth that had retained its integrity was the youngest, and the others were older and had undergone degeneration.

DR. FRANK WOODBURY: In connection with the remarks just made in favor of operative treatment in uterine fibroids I might refer to one patient whose history shows that circumstances alter cases, and that it is difficult to lay down any general rule that will cover every individual instance. This particular patient has been under my observation nearly twenty years. In 1874 I was called to see a colored woman, about twenty-four years of age, who had almost continuous menorrhagia. She suffered with pain, obstruction of the bowels, and difficult micturition. Examination showed a hard cervix with the uterus enlarged and firmly adherent, occupying nearly the whole upper part of the pelvis. I treated her on common-sense principles, inserting Barnes's rubber air-bags back of the uterus, inflating them twice a day until I had stretched the adhesions, and lifted the uterus out of the canal into the abdominal cavity. She became much more comfortable, and for a year continued the use of ergot and chloride of ammonia alternately. After freeing the uterus I introduced a rubber ring pessary inflated with air. She became greatly improved, and passed from under my observation for some two years, when she returned with leucorrhœa. I found that the pessary had ruptured, and was almost imbedded in the vaginal tissue. I removed the remains of the pessary, and found a cicatricial ring forming a support for the uterus. The patient again disappeared, and was not seen until a year and a half ago, when she sent for me. She was then suffering with an acute attack of pain in the abdomen—probably something analogous to the pleuritic stitches which occurs in old cases of pleurisy. An able physician had seen her and decided that she was pregnant and in labor. The uterus had steadily increased in size and was much denser than before, and bosses could be made out on the surface. On one occasion I remember that I had a member of this Society, an excellent surgeon and pathologist, examine the patient with me, and he pronounced it a case of sarcoma on account of the stony hardness of the cervix. I subsequently had a consultation with Dr. T. Benton Massey, a fellow-member, well-known

to us all as an expert in electro-therapeutics, in regard to the applicability of electrolysis to the growth. At this time I tried to introduce an exploring needle into the growth through the abdominal wall, but found the tissue almost like bone; subsequently I turned the case over to Dr. Massey, who treated her with excellent results by the Apostoli method. Under this treatment the tumor has become distinctly smaller. She now suffers no pain or inconvenience, and menstruates without difficulty. As I stated at the beginning, I regard this as an exceptional case; but, on the other hand, I am not as yet quite prepared to subscribe to the propriety of performing laparotomy in all cases of fibroma uteri.

An interesting point is that in 1874 she was willing to have the uterus removed, and indeed suggested the operation to me, but as I was able to afford her relief without it, I dismissed it on account of the risk; moreover, these operations were not as familiar to us then as now. Her general health has been very good, she has suffered very little, and during these many years she has been comfortable and able to earn her living by housework. The notes of the case may be found by consulting Dr. Massey's book.[1]

DR. CHARLES P. NOBLE: I wish to say a few words on the subject of the diagnosis of pregnancy. I think that there are cases in which the best of men may make a mistake in diagnosis as to the presence or absence of pregnancy. These are cases in which the pregnancy is complicated by a tumor, or cases in which the position of the uterus is altered, and in which the pelvis is more or less filled with inflammatory masses. I have myself seen one case in which I made a correct diagnosis at the fourth month of pregnancy, and after watching the case for two months gave up that diagnosis. It was afterward demonstrated that she was pregnant. The diagnosis in the first place was made partly from the physical signs and partly from the history, which was one of arrested menstruation for four months. There was a pelvic tumor continuous with the cervix, occupying the pelvis—apparently an adherent retroflexed pregnant uterus. After watching the case for two months, and finding that I could not hear the fœtal heart-sounds nor detect the intermittant contractions of the uterus, which should always be felt at this time, I gave up the diagnosis and she passed from under my care. I learned that an autopsy made later showed that the woman was pregnant, and had a tumor of the anterior wall of the uterus, which prevented one from hearing the fœtal heart-sounds and from feeling the intermittant contractions of the uterus. I can easily see how one might make a mistake where there was a uterine or other tumor in front of the uterus, but feel satisfied that if the cases are carefully investigated, mistakes of this kind will be very infrequent. It would be a great advantage to every practitioner if, when engaged to attend women in confinement, he would take every reasonable opportunity to become familiar with the feeling of the pregnant uterus. This is not only a great advantage to the pregnant woman and to the practitioner in the immediate case, but it also educates the physician to distinguish between different conditions in the future. Such a course would enable the practitioner to recognize deformities of the pelvis and malpositions of the fœtus, and prepare for the proper treatment, and to become better acquainted with the rhythmic contractions of the uterus. The only circumstances in which error might arise would be in cases of retained menstrual fluid, where the history would put you on your guard, and in some muscular tumors of the uterus which are said to present more or less typical intermittant contractions. Broadly speaking, when we have an abdominal tumor presenting rhythmic contractions, we can be satisfied that we have to deal with pregnancy. This sign is more reliable than the fœtal heart-sounds for the reason that if the fœtus is dead, or there is a large amount of liquor amnii, they are not to be heard.

DR. JAMES COLLINS: After the rich experiences brought forward on the other portions of Dr. Price's paper, I feel that I may detain you for a moment with a reference to the case of impaction of gall stones. These cases, I believe, are more frequent than one would suppose. I am glad that Dr. Price has given his experience. I recall two or three cases, and one especially, in which, after a long struggle and threatened obstruction of the bowel a gall-stone the size of a pigeon's egg was passed, and the patient was relieved. In another case I begged the consultants to permit the abdomen to be opened, but they would not agree to it. At the autopsy we found that a large gall-stone had formed; that adhesive inflammation had taken place between the gall-bladder and intestine; ulceration had occurred, and then the stone had entered the bowel and lodged in the ileum, causing complete obstruction. This case occurred ten years ago, I have seen another autopsy in which a similar condition of things was found. I believe that this happens not infrequently.

DR. MARIE B. WERNER: The treatment of ectopic gestation has always interested me greatly. In discussing this subject with Professor Winckel, of Munich, I found his favorite way of treating it was with one to three injections of morphine (0.05) into the amniotic sac, feeling confident that absorption will take place. I asked him what he did in case of hemorrhage. He replied that the blood could be disposed of by the peritoneum. Subsequently, in conversation with Dr. G. G. Bantock, of London, in regard to the disposal of the blood, I learned that he considered operation imperative. He believed that the blood would not be entirely absorbed, but that portions would become organized and produce adhesions, provided the patient escaped death.

One of the cases reported by Dr. Price to-night clearly shows that nature would have been unable to dispose of the blood, since omentum and intestines were so completely covered with clots that he found it difficult to separate them, and proves to me that, aside from arresting the flow of blood, the necessity of cleansing the peritoneal cavity of foreign matter is distinctly called for.

These points have been of interest to me, and I thought that they might be of interest to the Society.

The President: I have been especially interested with reference to the tumors of supposed malignant nature in the abdominal cavity. The fact that we often make diagnoses of malignant disease which are not substantiated by the subsequent histological examinations must be borne in mind. I am reminded of a case which occurred in my practice two years ago, where there was an abdominal growth which I believed to be a malignant tumor of the colon. On making an incision I came down upon a growth attached to the internal surface of the abdominal wall, and, cutting through it, I found that it was a large growth of the omentum adherent to many coils of intestines, I felt sure that it was a sarcoma. I removed it as thoroughly as possible, probably getting it all away. It was referred to a competent pathologist,

[1] Electricity in Diseases of Women, 2d ed., Phila., 1890, p. 147.

and found to be simply a lipoma of the omentum. I had assisted a friend a few weeks before to remove a tumor almost identical in appearance, and this has shown itself clinically to be malignant. The determination of the question whether or not these supposed cases of malignant disease are really malignant or simply a softening, or colloid degeneration of tumors of a hard nature, is, I think, important.

DR. WILSON BUCKBY: Twenty-one years ago a bit of information was given me by Dr. Atlee, who may be said to be the Father of Gynecology, notwithstanding the pioneering of McDowell. He said that menorrhagia was due in ninety-nine cases out of a hundred to the presence of fibroid tumors, and that in the early stages they were amenable to medical treatment, and that the degenerative processes which take place are due to the neglect of the proper medical treatment in the early stages. I called him in consultation in a case of extreme menorrhagia, where the woman was almost exsanguine. He advised me to use sea-tangle tents, as was then the custom, and to make a thorough application to the interior of the uterus. He held that nine times out of ten the fibroid tumor was capable of being absorbed by his stimulating application, which consisted of compound iodine, iodide of potassium, and carbolic acid in glycerine. This was swept over the interior of the womb, and internally was given the old-fashioned ergot. My experience has been that in many cases this treatment will enable you, with benefit to the patient, to delay surgical interference.

DR. PRICE: In regard to my case of sarcoma, I would say that spindle-celled sarcoma is one of the most benign tumors of the uterus. I have had a number of cases, some of which were operated on a number of years ago, and they are absolutely free from disease. The tumor which I have reported was entirely of a different nature; it was attached to everything in the pelvis. The least touch would cause bleeding, and you could scrape out great handfuls of brain-like tissue. It was impossible to remove it all, on account of the adhesions. All that could be removed with care was taken away, and the patient is doing well. I do not believe she will remain well. Fibro-sarcoma or spindle-cell sarcoma of the uterus is a very curable disease, and almost invariably is non-adherent. When removed it gives no further trouble.

In regard to the question of concealed pregnancy, I would say that in neither of the cases I have related did the physician examine the patient at all. Most of us in treating these cases treat them by simply looking at them without any examination; but if we attempt to do this kind of work, I think that we should go to the bottom of the condition. I do not believe that there is such a thing as concealed pregnancy—such a thing as a child of any size in the uterine cavity or outside of it. It is not our duty to find it. If there is any question of doubt, we should wait until sufficient time has elapsed, for pregnancy, unless of the extra-uterine variety, gives no urgent indications for interference. The case referred to by Dr. Noble is one in which both the mother and child were sacrificed by attempting to remove what was thought to be an ovarian tumor. A little delay would have rendered the diagnosis clear.

I agree with Dr. Ashton in regard to appendicitis. I am confident that we are too timid in these cases. If there is the slightest shadow of a doubt as to the septum between the abscess cavity and the peritoneum, it is our duty to break through and irrigate the whole peritoneal cavity. I have seen my brother operate for appendicitis five times through a median incision, tearing away all the adhesions and doing a complete operation. In the case I have reported, I tried to avoid opening the general peritoneal cavity, but when I passed two fingers to irrigate, I found that the peritoneum was opened, and I, therefore, loosened up everything and washed out the peritoneal cavity, and the result was favorable. A physician in this State was taken ill and appendicitis was suspected, but a delay of twenty-four hours was advised in order to clear up the diagnosis. The diagnosis was cleared up by the man's death inside of that time. If you suspect appendicitis, explain clearly to the patient the condition you suppose to exist and the danger of the two methods of treatment—the delay method and that by exploratory operation. An exploratory operation under proper surgical methods, with absolute cleanliness, has no business to cause more trouble than a simple vaccination.

Now in regard to hysterectomy. If there is a suspicion of malignancy, it is our duty to remove the uterus. If the tumor is a pure fibroma, and the woman is near the period of the change of life, it is our duty to let it alone. At the change of life the tumor undergoes retrograde changes. The same occur where the appendages are removed. In nine cases out of ten, the appendages are diseased, and they supply the stimulation to the growth of the tumor. The removal of the monthly congestion removes the cause of the growth, and at once you have a cessation of the growth of the tumor and the commencement of retrograde changes. The operation of the removal of the appendages is wholly useless in œdematous fibromas and fibroids undergoing cystic degeneration. In such cases it is folly either to wait or to remove the appendages; hysterectomy is the only treatment.

Dr. Collins has beautifully spoken my mind on the subject of gall-stones. In my case the transverse colon was immediately under the tumor, and there was nothing to hinder the occurrence of adhesions, ulcerations, and the discharge of the stone into the bowel; but in many such cases the patient will probably die from leakage into the peritoneal cavity. The ulceration may be outside of the position of the bowel, and it is our duty to open the abdomen and take out the stones.

A word as to the method of treatment mentioned by Dr. Buckby as having been recommended by Dr. Atlee. I have a supreme admiration for Dr. Atlee and the whole Atlee family. They have done more with McDowell for woman-kind in this land than any others, and have established on a firm foundation a condition of surgery that to-day, even in my own hands, has saved more than one hundred lives. The kind of fibroids that will be relieved by such treatment are not fibroids. They are either badly treated abortions or granular conditions of the endometrium: a condition that can be removed by the curette. Such a uterus is as smooth as a ball. It is not nodular.

I could wish no better example than the case cited by Dr. Woodbury as proof of the value of operative treatment. This poor woman was an invalid for twenty-two years, and was then treated with electricity by Dr. Massey—driving an electrode through the abdominal wall into the tumor. This is not Apostoli's treatment, and I congratulate Drs. Woodbury and Massey that they did not have a death instead of benefit from the treatment.

THE SIMPLE EXTRACTION OF CATARACT.[1]

Was the title of a paper by Edward Jackson, M.D.

[1] See page 408.

DISCUSSION.

DR. PETER D. KEYSER: It is always interesting to hear of successes and of methods, but the term "simple extraction" is not appropriate as applied to the operation described this evening. The proper designation would be "extraction without iridectomy." This is going back to original methods, first practised with a simple lance, and which often resulted in prolapse of the iris. To obviate this Beer's knife was devised. The occurrence of prolapse also led to Graefe's method of modified extraction with iridectomy. In this way the lens escaped without unduly stretching the iris. The operation of extraction of cataract demands as much judgment as any operation in surgery. It is necessary to examine the lens and the iris carefully. If the iris does not react freely to light, showing that the tissue is inelastic, iritis is very liable to follow operation, unless iridectomy be done. In such case I precede the operation some weeks by a preliminary iridectomy. In properly selected cases, however, extraction without iridectomy is to be preferred, and in washing out the anterior chamber the use of very weak solutions of eserine with boric acid. Strong solutions of eserine are liable to cause iritis.

Cataract appears in so many different forms that much judgment is required, and the operation may be attended with as many, if not more, complications than any operation in surgery. We scarcely find two cases exactly alike; one may not require iridectomy, another does. In those cases where prolapse of the iris comes on some hours after operation, eserine is not of much value and cannot replace iridectomy. My experience has been such that I am forced to think that many of the cases reported without iridectomy required an iridectomy subsequently to the extraction—within twenty-four to forty-eight hours.

The method of opening the capsule is one requiring the most serious thought in the operation, and the removal of a large piece from the center is advisable Laceration of an opaque capsule after extraction is a serious and dangerous procedure, and it is better to extract than to tear through on account of stirring up the vitreous with the knife or needle.

DR. JACKSON: I used the term "simple extraction," because it is a term commonly employed to designate the operation in question, and not to give the idea that cataract extraction was at all a minor or trifling operation. I think, though, that the term is strictly applicable, for the operation is distinctly simplified in certain directions. And in that it is more simple it conforms with the general tendency of surgical advance at the present time, which is toward the omission of various procedures that were formerly believed necessary, and the concentration of our attention on what is really essential, that it may be done in the best possible manner.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON ORTHOPÆDIC SURGERY.

Stated Meeting, October 16, 1891.

SAMUEL KETCH, M.D., Chairman.

DR. ROYAL WHITMAN presented a patient illustrating the application of a brace for the more perfect fixation of the spine in disease of the middle dorsal region. The appliance consisted of two saucer-shaped pads, covering the prominence of the shoulders, connected by an unyielding steel bar, passing across the chest; and two triangular hard-rubber pads, covering the lower two thirds of the scapulæ, connected by a steel bar. The Taylor back-brace was applied as usual, and the back-bar attached to its upper portion. The shoulders were then pressed back to their full limit, the front pads placed in position, and firmly attached to the brace by straps passing above to the neck-bar, and through the axillæ to the back pads, which held the scapulæ against the thoracic wall. Motion of the spine was thus confined entirely to the neck. Although the necessary movements of the arms were not restricted, forward reaching movements, which were always accompanied by flexion of the dorsal spine, were entirely prevented. This principle—the restraint of certain movements of the arms which tended to increase the existing deformity—was the point to which he wished to call the attention of the Society, as he was not aware that its importance had before been insisted on.

DR. R. H. SAYRE fully agreed with Dr. Whitman as to the necessity of keeping the shoulders back in this class of cases; but the difficulty hitherto had been to maintain such apparatus in proper position. In a paper which he had read at the recent meeting in Washington, he had called attention to the fact that when the disease was situated high up in the dorsal region, the plaster of Paris jacket did not give proper support, because it failed to hold the shoulders back, and that in such cases he was in the habit of employing pressure backward on the tips of the shoulders.

DR. NEWTON M. SHAFFER thought that the apparatus exhibited acted admirably in fixing the shoulders, but it was open to the grave objection that by exerting pressure on the scapular plates in this way, the uprights are prevented from exerting the proper amount of pressure at the seat of the disease, and so the apparatus was not able to arrest the traumatism of respiration. He thought this was a defect inherent in the apparatus, and not, as Dr. Whitman believed, simply an accident, due to improper fitting of the brace to the patient's spine.

DR. WHITMAN replied that he thought the apparatus exerted all the pressure that the skin would bear, and that by slightly modifying the curve of the uprights the defect noticed by Dr. Shaffer would disappear. His object in presenting the apparatus was to elicit a discussion on the question Whether or not it was desirable, in this particular class of cases, to attempt to control the forward movement of the shoulders.

BOND'S OPERATION FOR TALIPES VALGUS.

DR. A. M. PHELPS presented a young man whom he had been treating for a number of years for a very severe case of talipes valgus. Almost all methods had failed to give more than temporary relief, although in one instance there was no relapse in the case for a whole year. The patient constantly wore a support for the arches during the time.

The patient sought for relief, not so much on account of the deformity, as because of the severe pain which he suffered, and which prevented him from standing on his feet; without shoes, he could hardly walk. His occupation was printing.

In conversation with Dr. Bond, of Westminster Hospital, London, England, Dr. Phelps had learned of the operation which, in its author's hands, had been successful.

The operation performed by Dr. Bond was for the purpose of relieving the pain, which it certainly does.

He alluded to the operation, as "firing," the same as is done for the relief of spavin in a horse.

The operation consists in making transverse incisions with a Paquelin cautery, beginning at the inner malleolus, and extending one third of the distance across the sole of the foot, cutting through the cellular tissue down to the muscles. About four of these incisions suffice. Two semi-circular incisions are made, crossing the transverse ones. It seemed to Dr. Phelps that if the arch of the foot, before the operation is performed, were well shoved up in place, and held with plaster of Paris for a few weeks, that the shortening of the tissues in the sole of the foot by cicatricial contraction, would be more effectual, and would hold the arch in the normal position.

The operation when applied in this manner for the purpose of shortening the girders of the arch of the foot, is identical in principle with an operation which Dr. Phelps performed and reported to the American Orthopædic Association in 1889.

One objection which has bsen urged against the open incision method for talipes equinus, is that the scar is quite likely to be sensitive, and it is interesting to note that in this case the amount of the scarring being considerable, the patient walks upon the scarred tissues without any pain, and is able to work at his trade. The only support to the foot needed is an ordinary shoe slightly thickened on the inner side.

Dr. R. H. Sayre said that the amount of pain experienced in these cases of flat foot bears no relation to the amount of deformity. This patient's foot is still turned outward, and as in many other cases, when the foot is brought into the normal position, there is a very noticeable involuntary twitching of the peroneal muscles. The patient had been made comfortable once before for a period of a year, so that it was entirely too soon to say that the case would not relapse. As the arch of the foot is in large part maintained by the deeper structures, it seemed doubtful whether the scar tissue which did not go beneath the muscles, would be sufficient to hold up the arch, although at present it did this very well.

Dr. A. B. Judson said that in view of the well-known fact that cicatrices after burns contract persistently and with great force, the operation was not only ingenious, but quite likely to prove successful.

Dr. Whitman thought the operation absurd and extremely unscientific. No case of flat foot is cured until the important movement of abduction is perfectly free to its utmost limit. In the present instance abduction is not possible, and the case is only relieved, not cured. The only way to cure flat foot is by increasing the power of the muscles which support the weak portion of the foot.

Dr. T. Halsted Myers said that as the pain in flat foot is largely due to periostitis about the attachments of the ligaments involved, and in the joint structures themselves, this operation with the Paquelin cautery might act beneficially by counter-irritation, just as it does in many cases of joint disease elsewhere. Relief from pressure during the healing of the wound was also an important factor in the cure.

The President stated that if this procedure of Mr. Bond gave permanent relief from pain, that it would constitute a valuable accessory to our methods of relieving this troublesome symptom. In working people, in whom this deformity occurred most frequently, the question of a perfectly formed or perfectly acting foot was secondary. What patients wanted was, first, relief from pain; and secondly, feet that would give them an opportunity to earn a livelihood.

Dr. Phelps, in closing, said that the case was not presented as a cure for the deformity of hallux valgus, but that the flat feet seemed to be cured.

He had never observed periostitis in cases of flat foot, but he had frequently seen inflamed medio-tarsal joints, the result of pressure, and even the growth of new bone about the joints, precisely as is seen in severe forms of lateral curvature.

The scaphoid bone is really the key-stone of the arch, and when it is dislocated downward by the lengthening of the tissues in the sole of the foot, it causes great pressure. The patient will experience pain. This pressure long continued results in inflammation and growth of bone about the joint.

He thought it more scientific to shorten the girders of the sole of the foot than to do an osteotomy.

A CASE OF MULTIPLE JOINT DISEASE.

Dr. R. H. Sayre presented a little boy who had a strange combination of diseased joints, without any rheumatic history.

When about two years old the boy had a severe attack of scarlet fever, which was followed by an ischio-rectal abscess and a double otitis media, which still continues. About ten months after the attack of scarlet fever he fell, and shortly afterward the left knee became swollen and tender. A splint was applied, and the knee soon appeared well. Shortly after this the right knee and the right hip joint became successively inflamed. He was then treated for about a year by traction, first in bed, and afterwards with a long traction hip-splint. After this the left knee, the right knee, and the left shoulder became successively inflamed, and so severe was the inflammation in the shoulder that, at one time, it was almost completely anchylosed. In 1888, after an injury, the right knee and right hip became swollen and tender, and it was at this time that the case first came under his observation. After the flexion had been overcome, a splint was applied, which produced traction on both the knee and hip-joint. Photographs were exhibited, showing the case with the splint applied. Last July it was considered safe to remove the splint. At present he has no pain; extension is good, and flexion can be made to a right-angle. There is almost perfect motion at the hip-joint. He had looked upon the joint lesions as probably tubercular, but it was possible they were metastatic.

Dr. H. L. Taylor did not believe the joint lesions were tubercular.

The President also thought the whole clinical history pointed away from tubercular disease, and that the scarlet fever had probably given rise to a rheumatoid condition.

Dr. A. M. Phelps said the trouble was either rheumatic or metastatic, and as the joints did not suppurate, the former was the more probable origin. While the application of the splint probably assisted in bringing the case to so favorable a termination, it was quite likely that constitutional treatment alone would have been sufficient. He had been misquoted with reference to the occurrence of flexion at the hip joint. Where the *whole* number of cases have been reported, he believed the statistics would show that not 5 per cent. have recovered without angular deformity, yet he believed that not one single case of hip-joint disease need recover with angular deformity.

Dr. Sayre said that it was not material to this discussion whether the joints were tubercular or septic. The point he desired to bring out was, that no matter what the nature of a long-continued inflammation of a joint, protection of that joint is neces-

sary. He agreed with Dr. Phelps that no case of hip-joint disease ought to have angular deformity.

AN UNUSUALLY SEVERE CASE OF CONGENITAL LATERAL CURVATURE.

DR. R. H. SAYRE, presented such a case. The patient is now fourteen years of age, but her mother says that at birth the deformity was nearly as great as now. It was one of the most severe congenital cases he had ever seen, and she first came to him one week ago. Examination at that time showed that between the lower and upper ribs was a large V-shaped gap through which the liver could be felt. At the age of six years, she had pneumonia, and shortly after this, an abscess, which was probably connected with the pleura, opened through the right thoracic wall. Her breathing is puerile; there is no cardiac lesion. At the time of her birth, the child presented transversely, and the labor was difficult, so that it is possible that this may have had something to do with the deformity. He thought all the ribs were present. When first seen, her height was four feet six and three-quarter inches; but after being suspended, there was a gain of five-eighths of an inch. He desired to call particular attention to this increase in the height as the result of the suspension. In another case, between September 5th and October 15th, there had been a gain of three-fourths of an inch; in another, there was also a gain during a month of treatment, of three-fourths of an inch, and in still another, which measured before treatment four feet nine and seven-eighths inches, the measurement after about a month was five feet one and one-eighth inches.

DR. H. W. BERG said that the mere fact that the patient had such excellent use of her limbs would show that the curvature was not due to a lesion of the brain or spinal cord. If the ribs were congenitally absent, there would be sufficient cause for the curvature, without supposing any injury during labor.

DR. JUDSON remarked that the case was an illustration of the fact that in lateral curvature the kyphosis is sometimes very considerable, and may be as serious as in Pott's disease.

The President said that some years ago he had called attention to the frequency of lateral curvature in very young children, most of which he believed to be of congenital origin. He had repeatedly urged the necessity of the careful examination of infants' spines, as a matter of routine, and thus, were deformity present, an early opportunity for treatment. He believed that were this done, we should not see such distressing deformity as Dr. Sayre had presented. Quite recently Dr. F. Beely, of Berlin, had pointed out that in these early cases of scoliosis, the bones of the head were not symmetrical. The case just presented was instructive, as showing how great may be the deformity in cases which have not had the benefit of early and judicious treatment. Notwithstanding, the deformity develops very slowly. So many cases apply for treatment with the deformity well marked, that he was inclined to believe that a large proportion of all cases of scoliosis in children are congenital.

DR. V. P. GIBNEY presented a case of hip disease showing

A REMARKABLE RECOVERY BY NATURE'S METHODS.

A boy of eight years was admitted to the hospital in 1882, with disease of right hip in second stage. Family history, tuberculosis. Disease dated back to the previous April. On admission, he was fairly nourished. Hip flexed to 100° and held in this position. *Practical* shortening of three and three-fourths inches. On July 7, 1883, flexion had increased to 135°, and an abscess filled the whole gluteal region. On October 12 the abscess opened. November 16 he had become greatly emaciated, pale and waxy, the thigh acutely flexed on the abdomen and abducted, the head being apparently dislocated on the dorsum, while the whole thigh, from the junction of the lower and middle thirds to the trochanter major, was undermined, and large quantities of pus were discharging from two sinuses. Could only sleep with the aid of two drachms of the U. S. solution of morphine, and his condition was so bad that it was thought there was no chance of his recovery, and he was advised to be taken home. On the 27th of November, he was visited by a member of the House-Staff, who found him suffering from diarrhœa and night-sweats, with poor appetite, a pulse of 130, and a temperature of 101°. On the 7th of December his condition was about the same, except that a bed-sore as large as a half dollar had formed over the trochanter on the sound side. Not seen again until October 14 of the present year, when he returned, looking hale and hearty. He said that after leaving the hospital he had been confined to bed for one year and a half, and had then begun to go about on crutches. For the past four years he had been wearing a five-inch high shoe. The site of the old abscesses, and of the bed-sores are marked by very large cicatrices, the angle of greatest extension is 100°, and that of greatest flexion, 90°; the abductors are very tense. His measurements are as follows:

R. A., 27½; R. U., 30; R. T., 6 in.; down, 13½; R. K., 12; R. C., 10¼.
L. A., 29 ; L. U. 36; L. T., 6 in.; down, 17¼; L. K., 13; L. C., 11¾.

THE NECESSITY FOR EARLY MECHANICAL TREATMENT IN INFANTILE PARALYSIS.

DR. W. R. TOWNSEND read a paper with this title, calling attention to the various stages of the disease. The methods of making a prognosis as to return of power and as to deformities resulting, and demonstrating the value of mechanical treatment in all stages, but especially in that before the appearance of deformity as a method of prevention.

DR. H. W. BERG called attention to the importance of avoiding heavy apparatus which often seriously interferes with the paralyzed muscles. In addition to this, all such apparatus should be applied from a *healthy* fixed point of support. One of the most troublesome symptoms in long standing cases of infantile paralysis is the low surface temperature. He had given relief in two recent cases by wrapping the limbs at night in cloths wrung out of ice-water, and covering these with warm bed-clothes.

DR. WHITMAN said that the author spoke of equinus and equino-varus as the most common deformities in untreated cases. Equino-valgus he thought, to be the most common deformity in treated cases, and it was very difficult to prevent.

DR. SHAFFER said that in the fourth stage where contractures occur, and paralysis are very pronounced, he had met with a very surprising series of cases. He had records of four cases of equinus in adolescents and adults, where the anterior tibial muscles and the quadriceps extensor femoris were involved, and the patient sought relief on account of the deformity of the feet. He had by means of his antero-posterior traction shoe, restored considerable power to these muscles. Another important point was the improvement in the nutrition of the feet resulting from this traction. One patient used to come periodically, as

she expressed it, to "get her feet warm." Not only would the feet get warm during the application of the traction, but they would remain so for the rest of the day. He had never seen such results follow the use of electricity and massage, and similar methods of treatment, with or without tenotomy. Of course, in calcaneus cases, this traction cannot be applied, and hence, these desirable results cannot be obtained. The cause of the improvement seemed to be the peripheral nerve irritation occasioned by the traction, exerted principally upon the gastrocnemius and all the other resisting tissues. He had known the calf circumference to increase half an inch by actual measurement during a month of this treatment.

DR. R. H. SAYRE thought that one explanation of the increased power of the quadriceps extensor could be found in the fact that the feet were placed in a position where they can be used more advantageously.

DR. JUDSON considered the paper worthy of much attention, and it was a matter of congratulation that the profession at large already recognized the importance of sending these cases to orthopædic surgeons.

DR. H. L. TAYLOR thought that we might go even further than the author, and state that a very large majority of the deformities of the lower extremities are preventable by proper orthopædic treatment. A very badly deformed foot from slight paralysis will often prevent the use of many muscles; and even where muscular power cannot be restored, proper mechanical treatment will often secure to the patient very respectable locomotion. Mechanical treatment, by enabling the patient to go around more naturally, will often increase the warmth of the limbs; but for very bad cases he had, for a long time, made use of hot, dry air, or of two woolen stockings, one underneath and the other over the brace, to keep up the proper temperature of the parts.

The President said that it was a popular idea that braces tend to bring on increased weakness of limbs, and various disorders; and, until recently, the great obstacle to beginning mechanical treatment in the early stages has been the opposition of parents and of the attending physician. Within the last year he had seen two or three cases quite early, and had noticed a stage of tenderness, which might possibly prove a temporary contra-indication to mechanical treatment. He did not think this condition had been mentioned very generally by orthopædic writers.

DR. WHITMAN said that he had many times met with this condition.

DR. TOWNSEND, in closing the discussion, said that he thought much of the opposition to braces arose from the fact that orthopædic surgeons were not agreed among themselves as to what kind of apparatus was most suitable for the treatment of the different classes of cases. He desired to emphasize the importance of that part of the paper which refers to the experiments of Mr. Young on electrical examinations of muscles. If, by such an examination, one could ascertain that in a given case contractures and deformity would result, the task of persuading parents to allow their children to receive early orthopædic treatment would be a much easier one than now.

The Polyclinic.

CHILDREN'S HOSPITAL.

DR. MEIGS presented a case of tinea tonsurans, and gave the following treatment, which he said had been used with great success in the hospital, after other means had failed.

Solution No. 1:

℞.—Potassii iodidi..... ℥ss.
Liq. potassii ..... ℥j.

is rubbed thoroughly upon the affected area, with a piece of lint or rag, until the scales are softened and removed.

Solution No. 2:

℞.—Hydrarg. bichloridi..... gr. iij.
Sp. ætheris nitrosi..... ℥j.

to be applied with a piece of cotton or rag after Solution No. 1 has been well rubbed in.

Solution No. 1 loosens the scales and breaks up the crusts, which, to some extent, exist upon the head, so that the bichloride solution may find its way into the hair follicles and destroy the parasites, which it would not reach if the crusts were not previously softened and removed.

COOPER HOSPITAL (N. J.) NOTES.

THE TREATMENT OF VAGINISMUS.

VAGINISMUS consists of hyperæsthesia of the vulva, coupled with involuntary and painful contractions of the sphincter vaginæ. The slightest touch causes pain. It was formerly considered a distinct affection, but is now recognized as symptomatic of diseases of the uterus, vagina, rectum, or bladder. The cause, therefore, should be looked for, before treatment is instituted. Endometritis, vaginitis, inflamed hymen, ulcers at the vaginal orifice or urethral caruncles may give rise to it.

The treatment instituted by the late Dr. J. Marion Sims, in 1861, consisted in dividing the superficial fibers of the sphincter muscle on either side of the vaginal orifice near the fourchette, for the purpose of overcoming the painful and involuntary contractions of the muscle. Equally good results, however, may be obtained without resorting to the knife. After subduing the sensitiveness of the parts by the judicious use of cocaine, forcibly dilate the vaginal orifice with the thumbs to the extent of overcoming involuntary contractions; look for local ulceration around the orifice or other local causes; treat the cause in the manner indicated, and insert a tampon of cotton medicated with glycerine and tannin into the vaginal orifice. This should be daily repeated, and the vagina flushed with an antiseptic douche before the tampon is re-instated.—*Godfrey.*

FRACTURED CLAVICLE.—The difficulty of retaining a fractured clavicle in place is very great in the case of children. A wild, roystering little chap, six years old, broke his left clavicle; a clean, horizontal fracture, no green-stick affair. It was easily reduced; but the second day afterward he tumbled down a long flight of stairs. Next day he had a fight, and within two days more he fell off the fence and out at the tail end of an ice-cart. After each mishap the carefully-adjusted dressings were reduced to a chaotic state, and the bone overlapped. He was finally secured in this manner: The bone was replaced, the arm put in the Velpeau position, and a plaster bandage applied in the Velpeau manner—over a flannel bandage. This proved effectual, and the boy made a good recovery, no amount of rowdyism disturbing the dressing.—Waugh.

The Times and Register

A Weekly Journal of Medicine and Surgery.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.
A. E. ROUSSEL, M.D., French Exchanges.
W. F. HUTCHINSON, M.D., Italian and Spanish Exchanges.
HERMAN MARCUS, M.D., German Exchanges.
GEO. WHARTON McMULLIN, Manager Advertising Department.

THE TIMES AND REGISTER,
FORMED BY UNITING THE
PHILADELPHIA MEDICAL TIMES,
THE MEDICAL REGISTER,
THE POLYCLINIC,
THE AMERICAN MEDICAL DIGEST,
PUBLISHED UNDER THE AUSPICES OF THE
AMERICAN MEDICAL PRESS ASSOCIATION.

Published by the MEDICAL PRESS Co., Limited.

Address all communications in regard to Editorial and Subscription Business, to 1725 Arch Street, Philadelphia.

Address all communications in regard to Advertising, to 218 E. 34th Street, New York.

New York and Philadelphia, November 14, 1891.

DIPHTHERIA.

IN our next number we propose to devote considerable space to the subject of diphtheria, giving Dr. Brayton's excellent address before the Camden County Medical Society, and the treatment in force in the hospitals of Paris, with such other material as can be gathered together. Just now this disease is quite prevalent, not only in Philadelphia, but in nearly all our large cities. With sixty-three deaths last week in Philadelphia from diphtheria (including croup), we infer that the disease is exceptionally virulent, or else that there is something radically wrong in the treatment. From a study of the cases coming under our own observation, we are unable to find any extraordinary malignancy in the present outbreak, and can only conclude that the mass of the profession is ignorant of the best methods of treating this disease. In the history of diphtheria we have the record of a continual conflict between the rooted belief of the profession in the constitutional nature of this disease, and the striking results of treatment by local medication.

BUSINESS OR PROFESSION.

A DISPATCH from Cumberland, Maryland, states that considerable indignation has been aroused over the action of Dr. Craigen, in cutting out the stitches in a wound because the patient was unable to pay the fee demanded. Our readers will remember that a similar case occurred in Chicago, where a worthy physician was seriously injured in reputation by the sensational accounts in the newspapers; although the facts in the case were such as to cause the magistrate before whom suit was brought to throw the case out without listening to the defense. Perhaps if a few more such cases occur, the public will realize that the physician is not a public functionary, at every one's beck and call, pay or no pay; and that if the public desires him to hold such a relation towards it, the public must assume the charges of his support.

Dr. Craigen is a graduate of the University of Pennsylvania, in 1859; and may be presumed to have practised too long to offend as grievously against the laws of humanity as would be indicated by the newspaper accounts.

ELECTRO-THERAPEUTICS.

THE present number contains several very interesting articles upon electro-therapy, selected from the papers read before the American Electro-Therapeutic Association, at its first annual meeting in this city. Other papers from the same source will follow, so that before the close of the present volume we hope to present our readers all the material of practical value emanating from this meeting. And it is doubtful if a series of papers of equal value could be supplied on any other special topic. Electricity is one of the brightest spots in medicine to-day. It represents one of the principal foci to which bright intellects are attracted, and from which light is diffused. Electricity is seeking to mitigate the Draconian law that condemns the uterine appendages to capital punishment for the slightest offense, disdaining all thought of curative therapeutics. In spite of the length of time that has elapsed since electricity was first introduced as a therapeutic agent, and the number and high character of the men who have worked at its development, the limits of its applicability have not yet been reached. Nor is its use confined to a limited number of specialists, for it is not easy to find a practitioner, at least an intelligent and progressive one, who has not in his office the constant and faradic current batteries. In this, as in most cases, the public is quite ready to support the physician who has enterprise enough to keep up with the times. New methods are popular; new apparatus pleases the public. A new method of treatment, with a new form of mechanism, although purely experimental, will be chosen unhesitatingly by nine patients out of ten, in preference to old and tried methods. So goes the world, and we must go with it.

Letters to the Editor.

ELECTRIC BATTERIES.

I WANT some information in regard to batteries. Do you know whether or not the following batteries are reliable, namely: "Florence," "Phenix," "Manhattan;" the last has two cells, six currents. Give your preference. Manhattan costs $18.00, can buy for $9.00 wholesale; Phenix costs $14.00, can buy for $7.00 wholesale; Florence costs $8.00, can buy for $4.00 wholesale. If you would not advise me to buy either, suggest the name of one you would.

Are not the Waite & Bartlett galvanic batteries among the best? I wish to purchase a galvanic also. Also, best work on electricity.

J. T. BENNETT, M.D.

HARDINSBURG, IND.

[The Florence, Phenix and Manhattan faradic machines are all varieties of cheap induction coil instruments, commonly called "batteries," and are about equally unreliable.

You state that while the "Manhattan" sells for $18.00 at retail, you can buy it for $9.00; which fact is alone sufficient to stamp its cheap construction, and probable short life.

There are none of these small, low-priced machines that are of much use. Either they wear out promptly or fail to respond when called upon in an emergency, and are a constant source of annoyance. It is much better to buy a good instrument at first, even if the cost is greater. I have a Flemming portable in active service now, which has been doing hard work for ten years, and is as good as new. As to the galvanic batteries, my advice to general practitioners has always been, never purchase any form of closed cell, whose parts are not promptly and easily to be gotten at, replaced or repaired by the owner, with slight expense and no loss of time in sending away.

So far, I know of no form of galvanic cell better than the rubber Grenet, fitted with efficient hydrostrat, as made by Flemming, McIntosh, Sample, of Chicago, and some others. Perhaps Hutchinson's "Practical Electro-Therapeutics," to be obtained from Medical Supply Company, 1725 Arch street, Philadelphia, will do as well as any single book for reference.]

"SOME HOSPITAL CONSIDERATIONS."

AN editorial in your columns, signed by Dr. S. V. Clevenger, criticises an editorial of mine in the *Medical Standard* in a way that shows a total miscomprehension of the editorial. The editorial in question (as can be seen from its citation hereinafter) was a plea for complete medical control of training schools.

More than a decade ago a Chicago medical journal said anent the trained nurse dodge, then in process of incubation: "The idea of a training school for nurses certainly presents much that is roseate, and, to judge from the general outcry on the subject, that is the entire hue of the question. The change from the Sairey Gamps and Betsy Prigs of the past to the trained, intelligent young ladies of the future is certainly a great and desirable one. The theory of the relations between the physician and trained nurse is excellent. And there is also something pleasant in the idea of furnishing employment for educated women, of a nature that is not degrading. These are all pleasant features of the picture, but is there no opposite side to it? Is there not a possibility that the trained nurse, aided and abetted by lady philanthropists of the Jellaby stripe, may come to regard 'nursing' of more value than medical treatment and indulge in therapeutic vagaries of her own, to the neglect of the physican's. This question has already been answered in England, where the surgeons of Guy's Hospital have been reduced to a state of subjection by the nurses and lady 'philanthropists' of the vicinity. As a result, one of the 'trained' nurses was convicted of manslaughter for giving an unordered cold bath to a victim of meningeal tuberculosis."

These views have been more than justified by recent developments in the training school then established to control Cook county hospital by hysterical and paranoiacal female philanthropists compared with whom Mrs. Jellaby was a far-sighted humanitarian. In 1888 the wards of the county hospital were shut up under pretense of economy, and patients ware pauperized by being shipped to the poorhouse; but no protest came from the training school until the *Medical Standard* shamed the County Board into disavowal of the practice, which, nevertheless, was slyly continued until the jobbers of 1889 went out of power. A warden with humanitarian instincts, appointed in 1890, suddenly found his wards crowded with cases. The resentment thereanent of the training-school allies of the previous jobbers evinced itself in attacks on this warden. Nurses were so intent on gathering scurrility for this purpose that they neglected to feed their patients. The same evil occurred in 1891, and investigation as before demonstrated that the most neglectful officials were the "trained" nurses who were too ethereal creatures to perform certain ordinary duties, which patients had to do. On both occasions these nurses were supported in performances so ruinous to the discipline of an hospital by paranoiac "philanthropists," whose husbands were business, social, and political allies of the "stone-road" and "green" meat jobbers of 1889, and who, hence, resented conscientious performance of duty by county officials. Destruction of influences so ruinous to discipline is obviously the first step to be taken to reform the hospitals. This can be done, as suggested by Dr. Brandt, by the creation of a training-school under medical control alone. The next step is to make the executive officer supreme. At the termination of the present year a medical man should be the chief executive officer.

It is evident that had Dr. Clevenger read the editorial carefully, his plea for medical control could have been strengthened. JAS. G. KERNAN, M.D.

The Medical Digest.

EREDE says that sulphonal, in doses of 7½ to 15 grains, suppresses the night-sweats of consumption with certainty, one dose answering for several days.

DYSMENORRHŒA.—During the past two months seven cases of dysmenorrhœa have presented themselves for treatment. In each case antikamnia gave relief, and that in the small dose of 2½ grains every two hours.—Waugh.

EMULSION OF IODOL.—

℞.—Iodol	gr. xv.
Glycerin	℥iiss.
Water	f℥v.
Acacia	gr. xxxviiss.

—Trouchet.

KOBERT pronounces hydrogen peroxide a valuable antidote for hydrocyanic acid poisoning. Lethal or larger doses could be given daily for weeks to animals if the peroxide were injected in 15-minim doses when the toxic symptoms appear. It should also be given internally as long as the symptoms and odor of the poison are manifest.—*Am. Jour. Phar.*

OBESITY AND STERILITY.—In the *New England Medical Monthly*, McKee calls attention to the great frequency of sterility in obese women. Both sexes are alike sterile when over-fat. The observation is not new, Hippocrates having noted the connection between obesity and sterility in the Scythian women. The sterility depends, however, principally upon the co-existence of amenorrhœa, or other menstrual disorders.

YAMP; OR, CARUM GAIRDNERI.—This is a plant found in Wyoming and other parts of the West, where the tuberous roots are used as a food by the Shoshones. The taste is said to resemble the blended flavor of the nut and the parsnip. Trimble (*Amer. Jour. Pharmacy*) gives the following proximate analysis of the dry tubers:

Fat, wax, and caoutchouc	1.03
Resin, soluble in ether fort	.53
Saccharose	10.98
Glucose	5.32
Mucilage and albuminoids	29.20
Pararabin, etc.	2.75
Starch	5.35
Moisture	14.65
Ash	3.62
Insoluble and undetermined	26.56
	100.00

CHANTEMESSE states that the bacillus coli communis always causes fermentation of sugar; which the typhoid bacillus never does.

FOR PAINLESS UTERINE DILATATION.—

℞.—Sulphuric ether..... ℥iij.
Iodoform ..... ℥iij.
Pure cocaine..... ℥j.
M.—Steep in this the laminaria tents for eight days.

LABORDE claims that strontium salts are not toxic, but that they affect nutrition favorably, promote appetite and digestion, are antiseptic and germicide. They are more easily tolerated than potassium salts, and active in one-half the dose. The lactate is especially useful as a diuretic.

THE therapeutic employments of tobacco appears to be singularly rare, when we consider the universal use of this plant as a habit. Dr. J. F. Bird recommends smoking a cigar as a means of shortening the first stage of labor. (*Medical Bulletin.*) The production of nausea by this means has the same effect as when it occurs naturally; the rigid os relaxes, dilatation goes on rapidly, the perineum yields, and the uterine contractions proceed unchecked.

MOUTH-WASH.—

℞.—Saccharini..... gr. xxxviiss.
Acid. benzoici..... " xlv.
Tr. rhataniæ..... ℥iij, ♏xlv.
Alcohol absolut..... ℥xxv.
Ol. menthæ pip. ..... ♏viiss.
Ol. cinnamomi..... ♏viiss.
M.—S. Three parts of this to 27 parts of a 4 per cent. solution peroxide hydrogen.

—Miller, in *Cosmos.*

A WOMAN had been drinking steadily for a long time; until at length her digestive organs began to resent their abuse. The abdomen swelled, the stools became clay-colored, the appetite was lost, and even whiskey became temporarily distasteful.

The patient was put to bed, fed exclusively on hot clam broth, made with milk and liberally seasoned with capsicum, and the arsenite of strychnine (Abbott's half milligram granules) given every two hours. She improved rapidly.—Waugh.

INVETERATE NEURALGIA.—Sometimes, in chronic neuralgic cases, acetanilide fails to give relief in small doses; and when the dose is increased, toxic symptoms are manifested, and yet the severity of the attack is unabated. In two such cases lately, I have given antikamnia, in doses of 2½ grains, repeated hourly, and in both had the satisfaction of seeing the pain quelled and the patient comfortable before fifteen grains had been administered. Whether antikamnia is or is not a compound containing acetanilide is of very little consequence beside the question of its superiority to the latter as an analgesic agent; and this is now pretty well established.—Waugh.

COCILLANA.—The principal uses in which I have found this remedy to exert its most important influences are as follows: As a local application, used in the form of a spray, of a diluted solution made from a fluid extract, in acute coryza; and in the more chronic stages, beneficial results are plainly recognized. In hay asthma, some passive results were obtained. The same impressions are likewise secured by the repeated administration of small doses, by which means the entire mucous tract is easily reached. In spasmodic laryngitis of children, carrying the dose to the point of nausea will be found not to be transient, but permanent, in the results. The most inspiring uses for this drug, however, are in bronchitis, and more particularly in the secondary stage of pneumonia. The therapeutic reports of such cases—as I have freely extended its uses—are numerous, and I am gratified to state, with much authenticity, that I have had the most promising behavior in its use in all conditions of broncho-pulmonary diseases wherein the drug has been used, and, without exception, save slight nausea, I had no cause to regret the administration of this new and valuable remedy.

—Eckfeldt, *Med. Bulletin.*

GLANDERS AND MERCURY.—Koudorsky, in the *Vratch*, reports a case he has cured by means of this drug. The diagnosis was confirmed by the presence of the microbe and inoculation. He opened the abscesses freely, and washed with 1 in 500 solution of sublimate; the ulcers were irrigated with the same lotion and then brushed over with nitric acid, while mercurial inunction was diligently carried out daily. The patient was a laborer, aged twenty-nine years, admitted to hospital on the 15th day of the disease, and was dismissed after seventy-two days quite well, and temperature normal. The toxic symptoms of the drug appeared on the 62d day in the form of stomatitis.

PISTOL-SHOT WOUNDS OF THE BRAIN.—The caliber of a ball which penetrates the skull determines the probability and the time of death. Whether it be due to the violence of the primary cerebral shock, the compression from deep-seated intra-cranial hemorrhage, or septic infection, death within less than forty-eight hours generally follows penetration of a thirty-eight or forty-four caliber ball, even though in its course it has spared cardiac and respiratory centers. If not primarily fatal, fractures by projectures of larger caliber may be likened to the open compound fractures with solutions of continuity in bone and dura large enough to permit of free drainage, and therefore they offer some promise of recovery. The wounds made by small weapons, on the other hand, greatly resemble the punctured fractures which are justly dreaded for the certainty with which irritative and destructive changes follow in their wake.

When the surgeon arrives at the bed-side of a person who has made a suicidal attempt with a revolver of small caliber, cerebral shock, if at all present, has probably subsided. The patient may be conscious, but depressed. He may complain of headache. There is no paralysis. In the temple there is an opening not larger than the end of a lead-pencil, filled with a blood-clot. Hemorrhage, if not altogether arrested, is trifling. There is no conceivable conditiou in which the temptation to adopt an expectant therapy is greater. If yielded to, an aseptic dressing is applied and the results are patiently awaited. They are ordinarily not long in coming. Slight rise in temperature after the first day, headache more or less intense, delirium, mono or hemiplegia within the week, followed by coma and death. The autopsy reveals ordinarily that the missile is less responsible for the fatal issue than the retained wound secretion. The aperture in the skin is smaller than that in the cranium, and smaller than either is that in the dura. Indeed, the latter, through retraction of its fibrous tissues, is often smaller than the caliber of the penetrant ball. Within the brain, even a small bullet deflected from its course may cut a swathe half an inch in diameter. Retention and infection of the blood

and brain detritus fully account for the progressive development of the clinical phenomena during life.

The objects of an operation are twofold. First, to secure free drainage; secondly, to remove, if it be possible, the bullet. There can be no question but that those cases recover best in which both ends are attained. Of cases in which the missile was removed, only thirty-four per cent., while of those in which it was inaccessible fifty-eight per cent., succumbed (Wharton). But it may be that the more favorable issue in the former category is due to the fact that in them the bullet was near the surface and the damage to the brain proportionately small.

Certain is it that even with the aluminum gravity probe of Flührer the search for a small projectile, deeply seated in the brain, and often deflected from its initial course by bone or dural process, will, as a rule, be futile. On the other hand, the more important object of the operation, drainage, can very often be attained.—Ransohoff, *Lancet-Clinic.*

FRENCH NOTES.

A. E. ROUSSEL, M.D.

HYDROCHLORIC ACID IN DIPHTHERIA.—The experiments of Roux and Yersin have established that the virulence of diphtheritic *toxines* may be greatly diminished by adding to the products of the secretions of the bacteria a small quantity of acid. Starting with this idea Dr. Krazenski has employed hydrochloric acid in the treatment of six cases of croup in children from six months to three years of age, and in five cases of diphtheritic angina, two cases occurring in children and three in adults.

The following formulæ were employed:

℞.—Perchloride of iron..... 1 drachm.
Medicinal hydrochloric acid..... 15 minims.
Distilled water..... 6 ounces.

Mix.—Take at first one teaspoonful every fifteen minutes for four doses, then every thirty minutes for three or four hours, finally the dose is repeated every hour.

℞.—Perchloride of iron..... 2 drachms.
Hydrochloric acid..... 15 minims.
Distilled water..... 1 ounce.

Apply locally to the parts every two hours in diphtheritic angina.

In addition, the author employed gargarisms with a solution of toric acid 4 per cent., and in cases of croup a solution of sulphate of copper 1.5 per cent., taken internally as an emetic when the necessity arises.

In eleven cases the duration of the treatment varied from two to five days. All the patients recovered. Of the five cases of diphtheritic angina, in four cases the false membranes definitely disappeared at the end of from twenty-four to forty-eight hours. In the fifth case one week elapsed before the cure. The cases of croup were cured in from three to five days.

THE TREATMENT OF ULCERS BY THE APPLICATION OF HEAT (Dr. A. Stepanoff).—As the result of his observations the author arrives at the following conclusions:

1. The local application of heat to the treatment of cutaneous affections, as well as those of the deeper structures, should occupy a more important place among other methods of treatment.

2. All ulcers, syphilitic or otherwise, invariably yield to this caloric treatment.

3. The favorable action of the heat is particularly exhibited by the regularization of the circulatory phenomena and the nutrition of the affected parts.

4. The engorgement of the blood in the inflammatory zone rapidly disappears under its influence.

5. Heat undoubtedly exercises a favorable influence on the pains produced by the inflammatory process of the ulcer and tissues underneath.

6. The caloric treatment produces favorable results only when the applications are continued for seven or eight hours each day.

7. This treatment, employed by means of rubber sacks filled with hot water, should be perferred to the use of hot poultices, compresses, etc.

8. The application of heat in hospital treatment should be regularly organized, in order that a large number of patients may partake of its benefits.

9. This prolonged application of heat does not produce any irritation of the skin if certain preventive measures are taken.

10. The caloric treatment presents two advantages: (*a*) The time of the patients stay in the hospital is considerably reduced. (*b*) The financial expenses are usually reduced by the method.

—*Revue de Thérapeutique.*

Medical News and Miscellany.

DR. F. D. CLARKE, of Chicago, left an estate valued at $125,000.

RUSSIA reports the influenza as starting on another trip around the world.

In Paris there are published 145 medical journals, 8 pharmacal, and 161 lay journals.

THE overcoat thief has reappeared, and appropriated Dr. Hudder's ulster last week.

IBSEN is said to have commenced as a druggist's apprentice in Norway, and was afterwards a medical student.

DR. E. D. BIDDLE (Missouri Med. College, 1880,) has removed from Mt. Carmel, Ill., to a larger field of practice in Evansville, Ind.

AN inspector of Dusseldorf claims to have found trichinæ in some pork that had been pronounced sound by the American inspector.

THE women physicians, pharmacists and dentists of Illinois intend to prepare an exhibit to be made in the Illinois State building, at the great fair.

THE Department of Electricity is making an effort to secure a complete collection of historical electrical apparatus, in order to show the progress of the science from early times.

A WRITER in the *Occidental Medical Times* reports a case of maggots in the nasal cavities. Over two hundred were removed by injections of peroxide, kerosene oil, etc., with calomel insufflations.

AN English Board of Guardians has passed a resolution advocating the substitution of milk for alcoholic stimulants in the hospitals.

They should pass another, substituting oats for the annual corporation dinner.

IN the Sahara has been discovered an herb called by the Arabs the laughing plant. The dried seeds are powdered, and of this a small dose produces effects similar to those of nitrous oxide gas. After an hour's boisterous delirium, sleep supervenes for a like period, when the taker awakes with the recollection of happiness.

A BELGIAN physician reports that he delivered a woman of a fine boy; the mother being fifty-nine years and five months old. She had been a widow for twenty years. She nursed her child well, and weaned it on her sixtieth birthday.

CHICAGO medical students put a skeleton in a young lady's room as a joke; but the Chicago type of young lady is not afraid of anything dead or much that is living; so this specimen threw the skeleton out of the thirty-fourth story window. Now the students are out a $50 skeleton.

A FRENCH army surgeon was living with a woman who had previously been a dentist's mistress. The dentist annoyed the surgeon by scurrilous letters, written to the colonel of the surgeon's regiment, until the latter turned on his persecutor and killed him. For this he is to answer a court-martial.

THE Camden County Medical Society met at the Haddon House, Haddonfield, N. J., last Tuesday. Reports were read by Drs. Marcy, Jarret, Davis, Walmsley, Ridge, Wills and Braymer. The meeting closed with a dinner, at which a number of "sentiments" were expressed.

A REMARKABLE case of precocity has occurred in Trenton, New Jersey. A boy six years old is said, on good authority, to weigh over one hundred pounds, to be strong and hirsute, and so well developed as to be a dangerous playmate for girls. We regret that we have been unable to obtain further particulars.

THE Mississippi Valley meeting at St. Louis does not seem to have been wholly and entirely peaceful. It is said that some of the city doctors charged that there was too much Marion Sims Medical College in theirs, and withdrew. The meeting was a great success, nevertheless.

DR. IGNATIUS DONNELLY, the "Shakespeare—Bacon," "Atlantis," and "Cæsar's Column" man, will lecture upon the "Authorship of the Shakespeare Plays," on Monday evening, at the Academy of Music, for the benefit of St. Agnes' Hospital. If Dr. Donnelly talks as well as he writes, his lecture will be well worth hearing.

IN the *Chicago Tribune* Mr. Charles Marchand states that he entered a prominent pharmacy in that city and called for Marchand's peroxide of hydrogen. He was furnished a bottle of the commercial article, used only in the arts, but with Marchand's name written on the label.

This may be business, but it is the sort of business that is compelling physicians to dispense their own drugs.

CHICAGO Scotchmen have announced their intention to commemorate their immortal poet by building the Burns free hospital. Concerning this project the Chicago *News* says: Chicago has many hospitals, but none too many. There is room for a hospital that will never turn an emergency case away from its doors, however poor and friendless the patient. There cannot be too many hospitals in which broad humanitarianism and practical charity shall outweigh the red tape of management. Chicago's hospitals have not kept pace with the city's unparalleled strides toward metropolitan conditions. There are noble institutions among them and all are doing good work, but the time will come when the destitute stranger may receive free hospital treatment in Chicago without being branded as a pauper.

ELECTRICITY is to be the motive force in Jackson Park during the construction of the buildings. The electric plant has been completed and steam engines must go. This is done in order to reduce the fire risk. The saw mills, used in getting out building material, which have been run by steam, are now supplied by electric power, furnished, if desired, night and day. Electrical Engineer Sargeant is prepared with a sixty horse-power plant to supply electric-motor service. In a few days, three hundred horse-power will be available.

THE death, under mysterious circumstances, of Dr. Bergeron, a well-known Parisian physician, occurred a few days ago. He was sitting at a *café* with a friend and a lady with whom the doctor lived. The friend complained of a sore throat. "Let me give you some aconite," said the doctor, "nothing like that for sore throat." He then sent the waiter for a bottle of the drug from a neighboring chemist, mixed a small dose for his friend, and then poured about half the bottle into his glass, which he forthwith tossed off, telling his mistress, who tried to dissuade him, that it could do him no harm. A few hours later both he and his friend became very ill. The latter soon recovered, but the doctor died.

WEEKLY Report of Interments in Philadelphia, from October 31 to November 7, 1891:

CAUSES OF DEATH.	Adults.	Minors.	CAUSES OF DEATH.	Adults.	Minors.
Anæmia	1	1	Inanition		11
Aneurism of the aorta	2		Inflammation bladder	1	
Alcoholism	1		" brain	4	4
Apoplexy	9		" bronchi	3	7
Asphyxia		1	" kidneys	5	1
Asthma	2		" larynx		1
Bright's disease	11	2	" liver	1	
Burns and scalds		2	" lungs	15	9
Cancer	12		" peritoneum	1	
Casualties	6	1	" pro. gland	1	
Congestion of the brain		2	" s. & bowels	7	1
" " lungs		1	" tonsils		1
Caries of tibia	1		Leucocythemia	1	
Cholera infantum		3	Marasmus		14
Cirrhosis of the liver	1		Measles		1
Consumption of the lungs	55	7	Neuralgia of the heart	1	
" " bowels	1		Obstruction of the bowels	8	
Convulsions		17	Old age	14	
Croup		22	Paralysis	8	
Cyanosis		5	Poisoning, arsenic	1	
Debility	2	2	Pyæmia	1	
Diabetes	2		Rheumatism		2
Diarrhœa	1	2	Stenosis of trachea		1
Diphtheria		41	Septicæmia	2	
Disease of the heart	21	4	Softening of the brain	1	
" " liver	2		Suicide, hanging	1	
Dropsy	2	4	Teething		2
Dysentery	2	3	Tetanus		1
Embolism, cerebral	2		Tumor, abdominal	3	
Erysipelas		1	" of brain	1	
Fatty degeneration of the heart	2		" uterus	1	
Fever, scarlet		7	Ulceration of the stomach	1	
" typhoid	3	1	Uræmia	4	
Hemorrhage	2		Whooping cough		1
Hernia	1		Total	224	186

THE KELSEY ORIENTAL BATH CO., LIMITED.

H. W. KELSEY, Manager,

Turkish and Russian Baths,

1104 Walnut Street, Philadelphia.

OPEN FOR GENTLEMEN ALL HOURS.

FOR LADIES, 9 A. M. TO 6 P. M., WEEK DAYS ONLY.

Single Baths, $1.00; 7 Tickets, $5.00; 15 Tickets, $10.00.

DOCTOR: Carbonic acid escapes as soon as the corks are removed from bottles containing Mineral Waters, and its restraining influence on germ growth and rapid contamination of the water is lost. The remainder, after the first draught, must be thrown away, or water more or less unfit for use be drank. These two alternatives are avoided byprescribing our

G. E. Mineral Water Salts,

which we guarantee to be chemically pure, and exact combinations of the solids contained in water of like name. By adding these salts to fresh water the quantity needed may be prepared *as* desired, securing a

PURER,
CLEANER,
MORE ECONOMICAL,
MORE CONVENIENT

draught of Mineral Water than can otherwise be obtained, absent from the Springs. *Also*, and not less important, we have completely disguised the bitter, nauseous taste, inherent to these valuable remedies, without impairing their efficiency.

We prepare a full line of G. E. Mineral Water Salts, which may be ordered of any druggist. Ordered in pound bottles, (equal to about eight quarts of water of like name) the cost to the consumer is *less* than of the bottled water.

W. T. Thackeray & Co.,

Gen'l Agents, H. K. Mulford & Co., Chemists,
Cor. Market and 18th Sts., Philadelphia.

Colonnade Hotel,

H. J. & G. R. CRUMP,
Cor. 15th and Chestnut Streets.
One block from Broad St. Station,
PHILADELPHIA.

ENTIRELY REMODELED, REFITTED AND REFURNISHED.

250 Rooms

European Plan $1.00 per day and upward.
American Plan $3.50 per day and upward.

Restaurant

(First Floor, Fifteenth Street Door.)
UNEXCELLED for convenience of location, beauty of appointments, nicety of service.

Café

(Chestnut Street)
especially arranged for prompt and excellent service

CH. MARCHAND'S
PEROXIDE OF HYDROGEN.

(MEDICINAL) H_2O_2 (ABSOLUTELY HARMLESS.)

Most powerful bactericide and pus destroyer.
Endorsed by the medical profession.
Uniform in strength, purity, stability.
Retains germicidal power for any length of time.
Taken internally or applied externally with perfect safety.

Send for free book of 72 pages, giving articles by the following contributors:

DR. ROBERT T. MORRIS, of New York. **"The necessary Peroxide of Hydrogen."** *Journal of the American Medical Association*, Chicago, Ill.

DR. S. POTTS EAGLETON, Resident Physician in the Children's Hospital of Philadelphia. **"Résumé —Hydrogen Peroxide in Surgical Affections."** *Medical and Surgical Reporter*, Philadelphia, Pa.

NOTE.—Avoid substitutes—in shape of the commercial article bottled—unfit and unsafe to use as a medicine.

Ch. Marchand's Peroxide of Hydrogen (Medicinal) sold only in 4-oz., 8-oz., and 16-oz. bottles, bearing a blue label, white letters, red and gold border, with his signature. Never sold in bulk.

PHYSICIANS WILLING TO PAY EXPRESS CHARGES WILL RECEIVE FREE SAMPLE ON APPLICATION.

PREPARED ONLY BY Charles Marchand

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris" (France).

☞ Mention this publication.

SOLD BY LEADING DRUGGISTS.

Laboratory, 10 West Fourth St., New York.

Notes and Items.

DOCTOR: "It is a little difficult to diagnose your case. Perhaps you have been eating too much."

Patient: "Impossible. This hotel is run on the European plan."

BOBBY: "What is a nursery, Uncle George? Sis says it's a place where they raise trees."

Uncle George: "Sis knows better than that. It's a place where they raise thunder."

"LOOK HERE," said an excited man to a druggist, "you gave me morphine for quinine this morning!"

"Is that so?" replied the druggist. "Then you owe me 25 cents. That's the difference in the price."—*Brooklyn Life.*

IOWA PRACTICE FOR SALE.—Our town is on the trunk line of the Chicago and Northwestern Railroad, forty miles east of Omaha, in one of the richest corn belts of the world; 1,000 inhabitants and growing rapidly; five churches; two banks; two newspapers; one medical office besides my own; one of the best schools in the West; a fine normal college. The county is old and the people well-to-do; ten miles north and south to a town, and fifteen east, and twenty-five miles west. Roads good and farmers prosperous. I have a nice residence on a good corner lot, two blocks from depot and two from business. New house and L of eight rooms; well finished, fine lawn and trees, cellar, wood-house, etc. Apples, pears, plums, grapes, cherries, raspberries, blackberries, strawberries on lot. The buildings could not be put on for $1,500, and the lot is worth $400. I will take $1,700; $800 of which must be down. I will introduce a good man into a practice that the first year will give him $2,000, and can be increased or doubled. Address,

"IOWA," care of THE TIMES AND REGISTER.

DOCTOR! I WANT YOU TO KNOW ME AND MY

DOSIMETRIC GRANULES.

I haven't time to call on you, but I'll meet you half way; send me your address and **One "Almighty Dollar,"** and I will send you a nice 9 (½ drs.) phial pocket case, filled with representative granules.

MY PRICES WILL PLEASE YOU.

DR. W. C. ABBOTT, Ravenswood, Chicago, Ill.

A $50.00 Investment

Possessing the following remarkable features is deserving of prompt and full investigation:

1st—For $50.00 you can purchase one fully-paid, non-assessable shares of stock of **THE COLORADO SPRINGS GARDENS COMPANY,** having a par **value of $100.00 per share;**

2nd—**SIX PER CENT DIVIDENDS** will be paid, half in January and half in July, upon the amount invested;

3rd—**EXTRA DIVIDENDS,** to the amount of your investment, will be paid you during the next few (and within ten) years.

The State Trust Co., 50 Wall St., N. Y., has $250,000 of stock on deposit to

Guarantee Principal AND Dividends.

SPECIAL—**All stock purchased at above price prior to December 1st will receive the dividend due January 1st FREE. After December 1st the price of the stock of the**

Colorado Springs Gardens Company

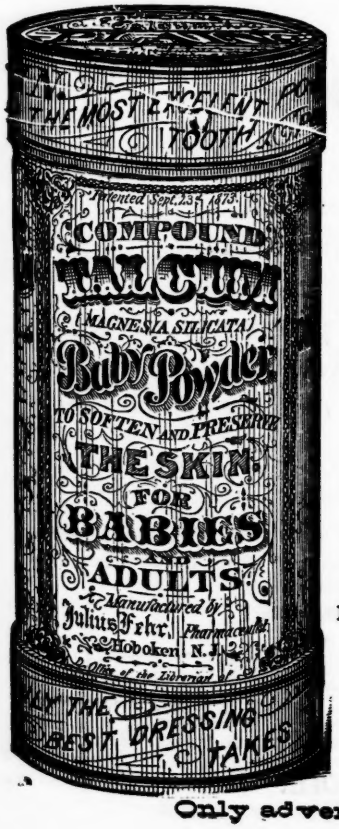
will be **$50.00 PER SHARE,** with 6 per cent. interest added. Write at once for Illustrated Prospectus to

CARLISLE N. GREIG,
High Class Investment Securities,
45 BROADWAY, NEW YORK.

STAMMERING

And all nervous affections of speech thoroughly corrected. Established 1879. Pupils sent us by Drs. Hammond, Seguin, Lusk, and other specialists. Younger pupils pursue ordinary studies, Book-keeping, Stenography, etc., while under treatment. Pamphlets with rules, exercises, illustrations, suggestions, and testimonials from eminent men and pupils, free.

The Bryant School for Stammerers, 9 W. 14th St., N. Y.



J. FEHR'S
"COMPOUND TALCUM" "BABY POWDER,"

THE

"HYGIENIC DERMAL POWDER,"

FOR

INFANTS AND ADULTS.

COMPOSITION: Silicate of Magnesia with Carbolic and Salicylic Acids.

PROPERTIES: Antiseptic, Antizymotic, and Disinfectant.

—USEFUL AS A—

GENERAL SPRINKLING POWDER,

With positive Hygienic, Prophylactic, and Therapeutic properties.

Good in all affections of the skin. **Sold by the drug trade generally.**

Per Box, plain, 25c.; perfumed, 50c. . . . Per Dozen, plain, $1.75; perfumed, $3.50.

THE MANUFACTURER:

JULIUS FEHR, M.D., Ancient Pharmacist,
HOBOKEN, N. J.

Only advertised in Medical and Pharmaceutical prints.

SPECIFY "BATTLE" WHEN PRESCRIBING OUR PREPARATIONS.

BROMIDIA

THE HYPNOTIC.

FORMULA.—Every fluid drachm contains fifteen grains EACH of Pure Chloral Hydrat and purified Brom. Pot. and one-eighth grain EACH of gen. im. ext. Cannabis Ind. and Hyoscyam.

DOSE.—One-half to one fluid drachm in WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirum of fevers it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

PAPINE

THE ANODYNE.

PAPINE IS THE ANODYNE OR PAIN-RELIEVING PRINCIPLE OF OPIUM, THE NARCOTIC AND CONVULSIVE ELEMENTS BEING ELIMINATED. IT HAS LESS TENDENCY TO CAUSE NAUSEA, VOMITING, CONSTIPATION, ETC.

INDICATIONS.—Same as Opium or Morphia.

DOSE.—ONE FLUID DRACHM—(represents the Anodyne principle of one-eighth grain of Morphia.)

IODIA

THE ALTERATIVE AND UTERINE TONIC.

FORMULA.—Iodia is a combination of active principles obtained from the Green Roots of Stillingia, Helonias, Saxifraga, Menispermum and Aromatics. Each fluid drachm also contains five grains Iod. Potas., and three grains Phos. Iron.

DOSE.—One or two fluid drachms (more or less as indicated) three times a day, before meals.

INDICATIONS.—Syphilitic, Scrofulous and Cutaneous Diseases, Dysmenorrhea, Menorrhagia, Leucorrhea, Amenorrhea, Impaired Vitality, Habitual Abortions and General Uterine Debility.

SPECIFY "BATTLE" WHEN PRESCRIBING OUR PREPARATIONS.

THE AMERICAN ANTIPYRETIC ANALGESIC & ANODYNE.
A SUCCEDANEUM FOR MORPHIA.
A NEW COMBINATION OF COAL TAR DERIVATIVES OF THE SERIES CnH2n-6.
Antikamnia
OPPOSED TO PAIN.
EXHIBITED IN SCIATICA, NEURALGIA, RHEUMATISM, MENSTRUAL NEUROSES, LA GRIPPE AND ALLIED COMPLAINTS IT SECURES THE DESIRED RESULT.

The GENUINE is put up in two forms only:—**"POWDERED" AND "FIVE GRAIN TABLETS."**
Samples of each, with full information, sent free on application to
THE ANTIKAMNIA CHEMICAL CO., - ST. LOUIS, MO.

"A true scholar never ceases to learn."—HOGARTH.

FORMULA.

Each fluid drachm contains:
PORTO-CHLORIDE IRON, one-eighth grain.
BICHLORIDE MERCURY, one hundred and twenty-eighth grain.
CHLORIDE ARSENIC, one two hundred and eightieth grain.
With CALISAYA ALKALOIDS and AROMATICS.

ALTERATIVE TONIC.

ELIXIR OF THREE CHLORIDES

(FERRI, HYDRARG ET ARSENICUM.)

INDICATIONS.—Anemia from any cause, Struma, latent Syphilis, General Debility, Tuberculosis, Malaria, Loss of Appetite, Habitual Constipation, Chlorosis, Chorea, Chronic Uterine, Pelvic, Zymotic and Dermatological Diseases.

DOSE.—One or two fluid drachms three or more times a day, as directed by the physician. The prescribed dose gives prompt action, produces a feeling of buoyancy, stimulating the appetite and the digestion, promoting assimilation, is very pleasant to the taste, assimilated by the most delicate stomach, does not constipate, nor color the teeth, and is harmless under prolonged use; this preparation has stood the test of time and experience, is uniform, unalterable, economical, and *can be relied upon to produce results.* ITS USE IS INDICATED IN A WIDE RANGE OF DISEASES. Where a more specific alterative is needed, other than increasing the dose or bichloride mercury, the physician may add without reservation any of the soluble salts of iodine or its compounds. Dispensed in twelve ounce bottles; price, $1.00.

The Formula of this Compound will immediately suggest itself to the thoughtful Physician.

ESTBD. 1832.

RENZ & HENRY, Drug Importers, Louisville, Ky.

TO BE HAD OF ALL LEADING JOBBERS. Please mention THE TIMES AD REGISTER.

TO THE MEDICAL FACULTY.

We beg to call your attention to a new preparation of COD LIVER OIL, called **OLEO-CHYLE.**

FORMULA OF OLEO-CHYLE,

Peptonized Cod Liver Oil.....85 Min.	Oleic Hypophosphites..... 5 Grs.
Pancreatine..... 2 Grs.	Sodium Hyocholate .....¾ Grs.
Water .....25 Min.	MIX.

DOSE: Two teaspoontuls thrice daily at meal times. It is preferable to take OLEO-CHYLE in milk.

OLEO-CHYLE is an admixture of Cod Liver Oil with Pepsin and Pancreatine; it is **Pure Norwegian Cod Liver Oil, perfectly digested with both Pepsin and Pancreatine** in exactly the same manner and consuming about the same length of time under the same conditions as to temperature etc., as oil would be subjected to by **the human stomach and duodenum** before being presented to the **lacteals for absorption into the blood.**

OLEO-CHYLE contains 70 per cent. of **Pure "Lafoten" Norwegian Cod Liver Oil** (which is a quality of oil containing the most **Iodine**, as well as the richest in **fat-producing** and **life-sustaining** elements) which amount it is impossible to suspend artificially in any Emulsion.

OLEO-CHYLE contains the **Hypophosphites** combined with Oleic Acid in such form that they do not interfere with the **digestion** of the **patient;** in fact, physicians will find Oleo-Chyle to be

A DIGESTIVE AGENT IN ITSELF,

it can therefore produce no eructation or nausea, and is pleasant to the taste.

OLEO-CHYLE is now in use by a large number of the Medical Profession, who, on trial of its merits, prefer it to Cod Liver Oil **in any other form.**

Any physician who has not received a sample of **OLEO-CHYLE** to test its merits will please apply to The Geo. W. Laird Co., who will furnish one free of expense, also book containing several hundred letters from Physicians endorsing OLEO-CHYLE in preference to any other preparation of Cod Liver Oil.

THE GEO. W. LAIRD CO., 247 Pearl Street, New York.

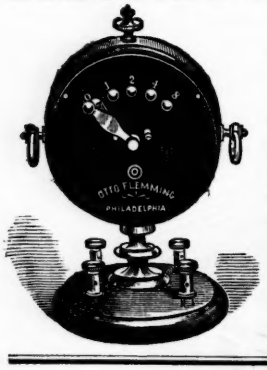
OTTO FLEMMING,

MANUFACTURER OF

ELECTRIC SPECIALTIES

FOR USE IN

MEDICINE AND SURGERY.



Portable and Stationary Medical Batteries, for induced and direct galvanic currents; Current Controllers, adapting the use of incandescent light circuits for either Electro-Therapeutics or Actual Cautery; Milliampère-Meters, Applying Electrodes, etc.

1009 Arch St., Philadelphia, Pa.

STRICTURE

TREATED WITH PHENOMENAL SUCCESS BY A NEW METHOD.

Send for literature giving particulars as to samples, formula, professional opinions, etc. This method has never been publicly advertised, but depends for its reputation upon responsible medical authority.

CENTURY CHEMICAL CO. OWOSSO, MICH., Feb. 10, 1890.

GENTLEMEN: Your **U. D. M.** is certainly a wonderful remedy. I have used it in four cases of Organic Stricture with *perfectly satisfactory results*, and as regards the "Medicated Bougies," they acted *better* than anything I have ever tried in *Chronic Gonorrhœa.*

Yours respectfully, S. S. C. PHIPPEN, M.D.,
President of the Board of Health.

Send also for

HOFF'S MEDICATED URETHRAL BOUGIES.

The treatment *par excellence* for Gonorrhœa and Gleet.

ADDRESS

CENTURY CHEMICAL COMPANY,

904 OLIVE STREET. ST. LOUIS MO

SUBSCRIBE NOW!

U. S. OFFICIAL POSTAL GUIDE, 1892

Every business man needs a *Postal Guide* to locate their correspondents' faulty addresses. The January *Guide* contains an absolutely correct list of over 66,000 Post-Offices, arranged alphabetically, according to P. O., again, according to States, and also according to Counties and States. It contains all the rules and regulations issued to the Postmasters and Public, and is edited by the P. O. Department at Washington.

PRICE January Guide, paper cover, with or without the 8 monthly Supplements, **$2.00**
" " cloth cover, gilt stamp, with or without Supplements, **2.50**

January *Guide* will contain over 950 pages solid matter, and monthly Supplements, 40 pages. I have been awarded the contract to publish the *U. S. Official Postal Guide* from November 1st, 1891, until July 1st, 1892. All subscriptions should be sent direct to me,

Agents wanted.

GEO F. LASHER, Printer and Publisher,
1213 and 1215 Filbert Street,
1214 and 1216 Cuthbert Street,
PHILADELPHIA, PA.

PARTNER WANTED.—With small capital. To join with physician in conducting a Sanatorium; already established in a profitable business that can be increased largely by a moderate outlay.

Address Sanatorium,

Care TIMES AND REGISTER.

PRACTICE for Sale in Philadelphia.

Apply to J. G. B.,

Office of TIMES AND REGISTER.

SYRUP OF FIGS

—(SYR. FICI CAL.)—

In order to meet the almost universal demand for a safe, reliable and elegant liquid laxative, the

CALIFORNIA FIG SYRUP CO.,

OF

SAN FRANCISCO, CAL., - LOUISVILLE, KY., - NEW YORK, N. Y.,

is utilizing the delicious blue Fig of California in the preparation of

SYRUP OF FIGS,

an agreeable and effective laxative or purgative, according to the dose and manner of administration.

SYRUP OF FIGS is delightful to the taste, and may be taken by every one, from infancy to old age.

SYRUP OF FIGS does not debilitate, and is perfectly safe.

THE DOSE As a purgative, for an adult, is from one-half to one tablespoonful, and may be repeated in six hours if required. As a laxative, one or two teaspoonfuls may be given at bed-time or before breakfast. For children the dose may be regulated according to age and desired effect.

SYRUP —OF— FIGS

Is recommended and prescribed by prominent physicians in all sections of the United States, and gives general satisfaction.

In addition to the blue Figs of California, we use the juice of true Alexandria Senna, representing the laxative and purgative principles without its griping properties, also pure white sugar and an excellent combination of carminative aromatics.

Devoting our entire attention to the manufacture of **Syrup of Figs** after a thorough study of the results to be accomplished and of the best methods to produce a perfect laxative, and with complete manufacturing facilities especially adapted to the purpose, we are enabled to offer to the medical profession, in **Syrup of Figs**, a laxative which, though simple in itself, has not been produced in all its excellence by other parties, and we believe and trust that physicians will not permit imitations to be used when they prescribe **Syrup of Figs** (Syr. Fici Cal.).

SYRUP OF FIGS

IS MANUFACTURED ONLY BY THE

California Fig Syrup Company,

OF

SAN FRANCISCO, CAL., - LOUISVILLE, KY., - NEW YORK, N. Y.

It is sold to the drug trade in bottles of two sizes only: the smaller bottles containing full four ounces and the large size about ten ounces.

THE NOW WELL KNOWN ISLAND OF

BERMUDA

Is reached in sixty hours from New York, by the elegant Steamers of the Quebec Steamship Co., sailing weekly. The situation of these Islands south of the Gulf Stream renders Frost unknown, and the porous coral formation prevents Malaria. The Quebec Steamship Co. also despatch HIGHEST CLASS passenger steamers every fourteen days for Santa Cruz and the principal West India Islands, affording a charming Tropical trip at a cost of about Five Dollars Per Day.

☞For particulars apply to

THOS. COOK & SONS.

A. E. OUTERBRIDGE & CO., Agents, 39 Broadway, N. Y.

LANOLINE LIEBREICH.

PATENTED.

The New Base for Salves and Ointments, is of White Color and Perfectly Odorless for Burns, Wounds and all Skin Diseases. Has Valuable Antiseptic Properties.

Anhydrous Lanoline, Toilet Lanoline in Tubes, Lanoline Soap, Lanoline Cold Cream and Lanoline Pomade.

MANUFACTURED BY

Messrs. Benno-Jaffe & Darmstædter, Martinikenfelde, Germany.

J. MOVIUS & SON, New York,

Successors to LUTZ & MOVIUS.

SOLE LICENSEES FOR U. S. Please mention The Times and Register.

National Union Vaccine Co.,

Established, 1870. Incorporated, 1884.

E. L. GRIFFIN, M.D., Pres. J. PETTET, A.M., M.D., Treas.

VACCINE FARM, ENGLEWOOD, ILL.

The largest, best equipped and most complete vaccine stables on the continent, conducted under the immediate supervision of highly educated physicians and assistants, of many years practical experience in this specialty. All animals, after being used, are slaughtered and carefully examined for any indication of inoculable disease. During the past year this work has all been done under the immediate supervision of the United States Government Department of Agriculture, and their skilled veterinarians, and in no case has any animal been found suffering from tuberculosis, nor any disease which would render the vaccine unfit for common use, a fact, which of itself speaks volumes for the care taken in selecting the animal used.

THIS IS THE ONLY VACCINE WHICH, SINCE 1876, HAS ALWAYS STOOD THE SEVERE TEST REQUIRED BY THE HEALTH DEPARTMENT OF CHICAGO.

—PRICES.—

10 Large Ivory Points, Well Charged [Warranted by package for 10 days.]	$1.00
Selected points, each,	.25
Or, five for	1.00

[Each point warranted separately for 14 days.]

Special and Liberal Rates Given to Agents, State and Charitable Institutions, State and Local Boards of Health, Wholesale and Retail Druggists.

Please mention THE TIMES AND REGISTER.]

FIVE DOLLARS.

FOR FIVE DOLLARS WE WILL SEND:

THE TIMES AND REGISTER, one year, $3.00
Murrell–Woodbury: What to do in Cases of Poisoning, - - - - - - - 1.00
Croom–McMurtry: Minor Gynecology, 1.50
Hadra: Lesions of Vagina and Pelvic Floor, - - - - - - - - - - - - - 1.50
Hewson: Earth Treatment, - - - - - 1.50

This offer holds good until December 1, 1891.

Fill up the following Order Blank and forward to office of the company:

ORDER BLANK.

The Medical Press Company, Limited,

No. 1725 Arch street, Philadelphia,

Please send me the following, for which I agree to pay the sum of $..... within three months:

THE TIMES AND REGISTER,- - - - - $3.00.
Five Dollar Offer, - - - - - - - - - - 5.00.

(Cross off what you do not want and fill out blanks.)

Name.....,

Town (Street and No.).....,

County....., **State**.....

THIS ILLUSTRATION REPRESENTS OUR

ELECTRIC * LIGHTER.

It is Complete in Itself.

The Current of Electricity is Generated by Chemical Action.

It Occupies a space of but **Six Square Inches.**

PRICE, - - - $5.

The Construction is Simple in the Extreme.

A CHILD CAN OPERATE IT.

Simply by Pressing the Centre Rod, the Current of Electricty is generated, and the light is instantaneous.

ECONOMY.

The material to charge the Battery can be obtained at any drug store, and costs but Ten Cents, and will run 30 to 60 days. Five thousand lights can be obtained from one charge. With proper care this battery will last a lifetime.

Any part can be replaced at a cost not exceeding Ten Cents. Aside from its use as a Lighter, this apparatus is now in great demand for domestic purposes, doing away with the use of matches and the dangerous results and disagreeable odors arising from the same.

We have taken especial care in the manufacture of these Electric Lighting Batteries; they are handsomely constructed in Nickle Plate and highly ornamental, and will take a prominent place among the bric-a-brac of Reception Rooms, Parlors, etc.

This Battery can also be used for Medical and Call Bell purposes.

LIBERAL DISCOUNTS TO THE TRADE AND AGENTS.

We desire reliable representatives in every State in the Union and invite correspondence on the subject

(Incorporated under the laws of the State of New York.)

BARR ELECTRIC MFG. CO.

17 & 19 Broadway, New York.

WALNUT LODGE HOSPITAL,

Hartford, Conn.

Organized in 1880 for the special medical treatment of

ALCOHOL AND OPIUM INEBRIATES.

Elegantly situated in the suburbs of the city, with every appointment and appliance for the treatment of this class of cases, including Turkish, Russian, Roman, Saline and Medicated Baths. Each case comes under the direct personal care of the physician. Experience shows that a large proportion of these cases are curable, and all are benefited by the application of exact hygienic and scientific measures. This institution is founded on the well-recognized fact that Inebriety is a disease, and curable, and all these cases require rest, change of thought and living, in the best surroundings, together with every means known to science and experience to bring about this result. Only a limited number of cases is received. Applications and all inquiries should be addressed

T. D. CROTHERS, M.D.,
Sup't Walnut Lodge, Hartford, Conn.

Eugene K. Plumly,

211-213 Church St. Philadelphia.

MANUFACTURER OF

PAPER BOXES.

Druggists' and Manufacturing Chemists' work a Specialty

TONICS, ANTIPERIODICS, EXPECTORANTS.

We desire to mention the Special Advantages of a few Eligible Preparations which meet many indications in Tonic Antiperiodic and Expectorant Treatment.

ESENCIA DE CALISAYA.

An agreeable, general tonic and stimulant, the equivalent of 40 grains Calisaya Bark in each ounce. As a palatable stimulant, antiperiodic and febrifuge, possessing all the medicinal virtues of Calisaya, it may be relied upon.

EMULSION OF COD LIVER OIL WITH HYPOPHOSPHITES.

This is the perfection of an emulsion, pure, fluid, palatable. Each fluid ounce contains: Cod Liver Oil, 4 fluid drachms; Hypophosphite of Lime, 8 grains; Hypophosphite of Soda, 4 grains; Gum Arabic Sugar, Glycerin, Water and Carminatives.

COCILLAÑA, GRINDELIA ROBUSTA, QUEBRACHO, CHEKAN, YERBA SANTA, LIPPIA MEXICANA, ANODYNE PINE EXPECTORANT, BRONCHIAL SEDATIVE, all have had their value proven in relieving respiratory affections.

Among Compressed Troches for Throat and Bronchial Trouble, we may mention Ammonium Muriate, Borax, Potassium Bicarbonate, Potassium Bromide, Potassium Chlorate, Potassium Chlorate and Ammonium Muriate, Potassium Chlorate and Borax, Sodium Bicarbonate, Soda Mint.

Descriptive Literature, and all information regarding our products promptly furnished on request.

PARKE, DAVIS & COMPANY,

DETROIT, NEW YORK AND KANSAS CITY.